THE AACE INTERNATIONAL SOURCE

YOUR SOURCE FOR TOTAL COST MANAGEMENT

PRESIDENT’S MESSAGE
VISION AND MISSION

CERTIFICATION CORNER
WHY WOULD YOU GIVE UP YOUR CREDENTIAL?

THE AACE INTERNATIONAL 2018 SLATE OF CANDIDATES

BONUS CONTENT - TECHNICAL ARTICLE
OF QUANTUM SHADES OF GRAY—A DILEMMA FOR THE EXPERT WITNESS
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The director of the MIT Center for Digital Business and a research associate at the National Bureau of Economic Research, Erik Brynjolfsson asks how IT affects organizations, markets and the economy. His recent work studies data-driven decision-making, management practices that drive productivity, the pricing implications of Internet commerce and the role of intangible assets.

Outside the Box will be a standing column. The views and opinions expressed are those of the authors and do not necessarily reflect the official policy or position of AACE International. We invite Source to readers to send suggestions on other potential TED Talks for publication to editor@aacei.org.

CLICK to watch Erik Brynjolfsson talk about “The Key to Growth? Race with the Machines” presented by TED.

As machines take on more jobs, many find themselves out of work or with raises indefinitely postponed. Is this the end of growth? No, says Erik Brynjolfsson -- it’s simply the growing pains of a radically reorganized economy. A riveting case for why big innovations are ahead of us ... if we think of computers as our teammates. Be sure to watch the opposing viewpoint from Robert Gordon.
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PRISM Connect 2017
A PRISM Conference & Networking Event
Manchester Grand Hyatt – San Diego, California, USA

Conference
October 30th-31st, 2017

Training
November 1st-3rd, 2017

Inspiring Keynotes – Valuable Connections – Educational Presentations
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One of the key responsibilities for governance and management vested with the AACE International Board of Directors for by our Constitution and Bylaws is the determination of the strategic direction of the Association. At the recent September/October 2017 meeting of the AACE International Board of Directors at the headquarters in Morgantown, WV, significant energies were devoted to renewing our Strategic Plan and developing initiatives to enhance the value AACE brings to its members.

The BOD, in concert with the HQ department leaders, updated the Vision and Mission statements for AACE. With a broadening of our international membership base and the greater breadth of industries and initiatives that our members participate in, the team worked diligently to make the Vision and Mission much more inclusive and relevant. While the newly formulated Vision and Mission have been posted to AACE’s website, it is important to more formally introduce these strategic messages to our fellow members and associates.

With the new Vision and Mission in hand, we direct our attention to educating members, prospective members and all those with whom we interact about the benefits of active participation in AACE at all levels of the Technical, Education, and Certification programs that we develop and sponsor. Technological advances, the volume and speed of data acquisition, analysis and transfer, and the continuing demands to deliver projects of every nature on more aggressive schedules amid greater investor sophistication will continue to require the skills and competencies of AACE’s members in order to focus attention on the broaden life-cycle of envisioning, developing, implementing, and sustaining the operability of projects and programs.

So, this is my challenge and call to action to all members of AACE to embrace the Vision and Mission, and commit to and sustain active participation in the ongoing growth and technical superiority of AACE International.

If you would like to contact our current president with questions or comments about The President’s Message please address your email to president@aacei.org. To engage in other discussions, check out AACE International’s Online Forums at web.aacei.org.

**AACE’s VISION** – To be the gathering place and source of thought leadership for professionals to drive successful project and program delivery.

**AACE’s MISSION** – AACE members drive projects to complete on time, on cost, and meet investment and operational goals. We arm our members with the technical tools and expertise to support successful projects and programs.
Included here is the slate of candidates for the 2018 election. Guidelines allow candidates to have posted a biography and goals/objectives for their respective offices. Annual AACE International elections are conducted electronically from Feb. 1 through 4 p.m. on March 15.

Adding Candidates by Petition
The AACE Bylaws provide the membership the option to petition to add candidates. The Bylaws, Article II, Section 4, reads: “Other nominations for the office of Director, or the office of an Officer of the Association, except for the position of Vice President Technical Board, Vice President Education Board and Vice President Certification Board, may be made by petition signed by at least 20 members in good standing. The petitioners shall be responsible for (a) obtaining in writing the agreement of the nominee to serve if elected, (b) securing the biographical data of the nominee, (c) submitting the petitions, the agreement, and the biographical data to be received by the Vice President-Administration no later than December 15th of each year. Each candidate’s name and biographical data shall be made available to the membership no later than December 31st of each year.”

Campaigning is Prohibited
The Board of Directors recognizes that the professional reputation and experience of candidates for Association office are ample testimony to their qualifications and ability to serve. Further, it is believed that these credentials do not need amplification and that campaigning for office by, or on behalf of, candidates is unnecessary, undesirable, and unprofessional.

After nomination, campaigning is defined as organized oral or written solicitation of votes or support, either by a candidate, or by an individual member or section, on behalf of a candidate. A proven violation of this policy shall be considered as prejudicial to the best interests of the Association and a breach of professional ethics. Such conduct will be subject to disciplinary action as provided for in the Association Bylaws. Further, a proven violation(s) of this policy by an aspirant to office, after due hearing in accord with the Bylaws, shall disqualify said individual from holding Association office.

The AACE International Canons of Ethics also states that, "Members will not campaign, solicit support, or otherwise coerce other cost professionals to support their candidacy or the candidacy of a colleague for elective office in a technical association."

To Vote, Members Must Cast a Ballot Electronically On or Before 4 P.M. Eastern US Time on March 15
Election of officers and directors will be by use of an electronic ballot. The official election ballot for officers will be posted and available to each member and associate member on February 1, 2018.

Members will link to the voting site from the AACE website homepage. Once at the site, members will use their member ID and password to access the ballot and vote. A six digit ID is required. If your AACE ID number does not include six numbers, just add zeros in front of the ID to make it a six digit ID.

Each voter shall properly signify on the ballot the voter’s choice for the various officers. A security feature of the electronic voting system allows members and associate members to vote only once. A voter can print out a receipt that will include an individual verification number as proof of having voted.

For election of Directors-Region(s), these candidates will be listed as a continuing or additional page for members or associate members in the regions electing candidates during the 2018 election. Each voter shall properly signify on the ballot the voter’s choice for the director.

Any member or associate member with questions or other concerns is asked to contact Headquarters for assistance.

Voting will end as of 4 p.m. eastern US time on March 15, 2018. The electronic system will block any voter from casting a ballot after 4 p.m. on March 15, 2018.

◆
Douglas W. Leo, CCP CEP FAACE Hon. Life

Douglas W. Leo, CCP CEP FAACE Hon. Life, is the Senior Estimating Manager at Value Management Strategies Inc. (VMS). Doug holds a MBA from Rochester Institute of Technology in international business. He has over 30+ years experience with an emphasis in total cost management, project estimating, and project consulting both from the prospective of the owner, engineering, construction industries and public sector. Since becoming a member of AACE International in 1993, Doug has become active in AACE International related activities. He has held elected office at the association level, been active in standing AACE committees, taught AACE sponsored courses, written papers and presented at Annual Meetings, been an active member of AACE taskforces, edited PPGs, contributed to RPs and been highly involved at the section level. Doug is certified as a Certified Cost Professional, AACE Intl. (1998), Certified Estimating Professional, AACE Intl (2008), and Fellow, AACE Intl. (2011). Doug has been awarded the AACE Intl. Honorary Life Membership 2016, AACE Intl. Outstanding Technical Subcommittee Chair 2015, and AACE Intl. Brian D. Dunfield Educational Service Award. 2015. He is the Chair of the Estimating Committee (since 2000), Chair of the Constitution and Bylaws Committee (since 2004), Member of the Ethics Committee (2017), was a member of the Certified Estimating Professional Task Force (2006-2008), elected Director of Region 2 (2003, 2004) and a three time elected Genesee Valley Section President. Doug is currently a member of the Kansas City Section.

Goals and Objectives:

As President of AACE International, I would:

- Actively support, strengthen and promote our Technical, Education and Certification Boards. Our technical and education products along with our certification programs are the life blood of our members and help build up the required engineering toolboxes that we bring to our employers, clients and project teams.
- Support, strengthen and promote our mentoring programs. I believe that it is the Association’s duty to provide a mechanism that shares the depth of knowledge of our senior members with our newest members.
- Continue to provide and support to our Sections to allow them to best understand the AACE International technical products and certification programs and share this information with the members at the Section level.
- Continue and expand our presence internationally. As the world economy continues to expand, the need for our Association members to bring Total Cost Management principles to owners, clients, employers, and project teams worldwide, is expanding exponentially and AACE International must be in the forefront.
- I bring a commitment to support and provide the amazing AACE International headquarters staff with the tools necessary to deliver the levels of service that we have come to expect from them.

Sean T. Regan, CCP CEP EVP FAACE

Sean has 30 years of experience in planning, scheduling, estimating, cost engineering, contracts and Total Quality Management (TQM). He has had positions in project controls field and home office systems and worked as project controls supervisor, project controls manager, superintendent, contract administrator and project manager. Mr. Regan has a proven record of excellence in achieving goals for project team and client in execution of project management and controls in the Middle East, North Africa, Eastern Europe, and the former Soviet Union. Mr. Regan is also experienced in implementing project management and construction control systems for facilities, telecommunications, power, infrastructure, nuclear, and petrochemical projects. Mr. Regan has experience with DTRA/DCMA/FAR, IMF, World Bank, EBRD, and Asian Bank polices and tendering in support of projects. He also is an active member, author and presenter for AACE, PMI, ACostE, ICEC, ACCE, and the Project Controls Guild.

Mr. Regan has presented to over 5,000 people on 5 continents and over 50 countries on project controls, international TCM, and skills and knowledge. An active member of the international communities and supportive of programs working with US government, UK government, Canadian government, and European Union. Including courses on CCP, CEP, EVP, PSP, CST, CCT, DRMP and project controls at introduction to expert level.

Goals and Objectives:

My overall goal and objective is that AACE needs to continue even more aggressively on the international market and working with international governments on the spreading of the greatest secret in the industry – AACE. This will come from cooperation with international associations and an increased international branding and translation strategy. This will be accomplished by:

- Strengthening the international recognition and appearance of the Association.
- Working directly with RD and local sections to strengthen the membership and financial solvency of the sections.
- Meet with maximum amount of sections and support regional conferences.
- Maximize the potential of the volunteer groups by streamlining redundancy.
- Establish reasonable metrics which will increase growth based upon geographical conditions, not just numbers.
- Increase team building and diversity among membership.
- Work with key associations that support AACE or can be supported in a joint venture position.
- Review of best international practices and align AACE future visions in accordance to these practices.
- Review that the associate boards practices and standards are in accordance to the future visions, such as new certifications, online practices, training and technology.
- Acceleration of translation by working in strengthening programs such as COMP, AEP and government entities inclusive of grants and donations.
Patrick Kelly is a Director in Navigant’s Global Construction Practice, and has more than 20 years’ construction-related experience, including construction management, contracting, project controls, CPM scheduling, Earned Value Analysis, Forensic Schedule Analysis for Delay and Disruption, and Claims & Disputes Resolution. He is a Professional Engineer, and is certified as a Planning and Scheduling Professional by AACE. In his career, Mr. Kelly has been a US Navy Surface Warfare Officer, a Navy Civil Engineer Corps Officer, a contract & construction manager, a scheduler & project controls manager, a construction claims analyst, and a testifying expert on Critical Path Method scheduling and Forensic Delay Analysis. He has also written and published many articles on scheduling and Forensic Schedule Analysis, and provided training on both software and CPM methodology to schedulers, analysts, and construction professionals. During his career in construction, Mr. Kelly has relied on the superior papers and Recommended Practices developed by AACE, and as a result he joined in 2007, and earned his certification as a Planning and Scheduling Professional in 2008. Since then, he has been actively involved in AACE, by submitting papers for publication in Cost Engineering journal and presentation at the Annual Meetings. Additionally, Mr. Kelly has held the Chair of the Claims and Disputes Resolution Technical Subcommittee for three years and is currently serving on the Board of Directors as Director, Region 2. His deep respect for AACE’s mission and superior technical content drives him to continue to seek ways to serve the organization and further its goals.

Goals and Objectives:
If elected, Mr. Kelly intends to facilitate growth and professional development among cost engineering professionals by:

• Building upon the momentum created by my predecessor in ensuring the continued financial success of AACE.
• Providing effective support for the conduct, control, and reporting of financial transactions in accordance with generally accepted accounting practices (as provided by Headquarters).
• Coordinating closely with Manager – Accounting and Administration and the Executive Director on financial matters.
• Providing timely, clear and concise communications to all stakeholders with regards to income, expenditures, forecast and balances for the prior reporting period.
• In coordination with all relevant parties, preparing annual budgets that further the goals of AACE in the coming years.
• Maintaining awareness, and monitoring when appropriate, operations to ensure that AACE achieves its organizational goals and fulfills its vision of becoming the gathering place and source of thought leadership for professionals who drive successful project and program delivery.

Calvin J. Speight Jr., CCP
Since joining the AACE International in 2008, Calvin has had an active role in the National Capital Section as an exam proctor, Treasurer, Vice President, and President. He most recently served as Region 2 Director, 2014–2016. At present, Calvin is the Government Liaison Committee Chair. He has also been published in Cost Engineering. He earned a B.A. in Business Administration from Rutgers University, 1985, and an M.B.A. from the University of Pittsburgh, 1990. Certificates held include Project Management from UC Irvine, 2006, and Advanced Project Management from Stanford University, 2012. He is a CCP, PMP, and MRICS. Calvin is the owner of Project Executive Outcomes LLC, a consulting firm that is focused on cost-schedule risk integration of major projects with the vision and leadership that successfully integrates and optimizes: business case, technology, sustainability goals, resiliency, and asset management. In the energy vertical of a leading consulting firm, his expertise impacted public policy decisions concerning military health, defense renewable energy, cost restructuring of civil agencies, and risk assessment for NASA. Prior to consulting, leadership roles held included Business Planning Manager at Pacific Gas & Electric and Senior Cost Engineer for Southern California Edison Nuclear Organization. Top line revenue experience was gained as the CFO of a start up construction firm that focused on public school capital improvement programs. In short, he can bridge the gap between engineering and management.

Goals and Objectives:
To drive my role as VP-Finance, I foresee these objectives as critical:

• Build upon the momentum created by my predecessor.
• Parlay my financial training to drive revenue that will assure funding of our vital programs, and enhanced marketing.
• Use methods such as activity-based costing, process improvement, and forecasting to drive decision-making.
• Create goodwill for AACE by promoting the association membership, certification, COMP, and other revenue levers to industry, government, and academia.
Les McMullan, FAACE

Les has been an AACE member and advocate throughout his career with more than 35 years’ experience in estimating, project controls and project management on capital projects. In 2012, he was named an AACE Fellow by his peers. He has served as President of the Montreal Section for many years where he continues to provide assistance to the board. In the last two years, he has served on the AACE Board of Directors as Director of Region 1 and President of AACE Canada. He is a graduate of McGill University and is invited frequently as a guest lecturer at Montreal universities on topics such as earned value and cost/schedule integration. Les has authored and co-authored technical papers on estimating, cost control, cost forecasting, change management and project controls management. His most recent paper in 2017 was entitled, “Proactive Trend and Change Management: Avoiding the Iceberg Effect”. Les attributes the knowledge attained from AACE as a key factor for a successful career. He has worked in various industries including oil and gas, mining and metals, pulp and paper, energy and held senior project controls roles on international projects, as well as corporate management positions in project controls and risk management for consulting organizations as well as owner organizations. This has provided a project lifecycle view, including strategic asset management as well as project control. In his role as Global Director, Project Controls at Hatch, Les is responsible for worldwide oversight of project controls and has extensive experience interfacing and providing leadership to global regional groups. He is dedicated to promoting skills and knowledge to develop the current and next generation of estimating and cost/schedule professionals.

Goals and Objectives:

- Use my experience and insight working at the Section and on the Regional Director level to work closely with the Regional Directors to build for the future and promote AACE.
- Facilitate sharing and communication between the Regional Directors of North America to build on regional success and new initiatives such as regional workshops, symposiums and virtual meetings.
- Provide guidance to the RDs for update of the Section scorecards for Section awards and recognition program.
- Promote certification and coordination of training materials with the Regions, HQ, as well as AEPs.
- Encourage regional presence and speakers at the Annual Meeting, as well as for regional meetings.
- a community page for the Regional Directors on the AACE website, as well as regular RD teleconference calls and prepare a metric dashboard for reporting.
- Sponsor Section and Region brainstorming sessions at the Annual Meeting to discuss recruitment, growth, education, student membership and sponsorship opportunities.
- Collaborate with Regions on ideas to reinvigorate less active sections and discuss succession plans to maintain robust activity in all regions and provide section board guidelines for successful meetings.
- Participate in marketing strategy for future growth.

Harrison W. Staley

Harrison has been a construction management professional for over 22 years and has used project controls in the management of numerous projects that span private and public sectors and includes schools, banks, community centers, police stations, public works, transportation and airport projects.

Harrison is currently a program scheduler for Ardmore Roderick. In the role of program scheduler he is responsible for developing and managing the master schedule for the Public Safety Program at Cook County Capital Planning along with reviewing all design and construction schedules and developing schedules as needed for special projects. Prior to working for Ardmore Roderick, Harrison worked for large international consulting firms and public agencies.

Harrison has been a member of AACE International since 2013 and is currently the Region 4 Director on the International Board of Directors (2016-2018) and the Vice President of the Chicago-Midwest Section (2016 – 2018). He previously served in roles as the Secretary, Scholarship Chair and Membership Chair for the section. He is currently preparing for the PSP exam and hopes to earn the certification in 2018.

As Region 4 Director, he conducted a number of conference calls with the Section Presidents to discuss the state of the association, share ideas gathered at the Annual Meeting and generally offer support to all of the sections. Additionally he has fostered communication among the sections in particular between sections that have been more active and those that have struggled with membership and participation.

Goals and Objectives:

I have enjoyed my time on the Board of Directors and would love to continue and give back to the organization and its members with volunteer service.

- Establish more open communication between the regions which will encourage support, comradery, growth and improvement for North America and within the regions themselves.
- Reach out to and visit as many sections in North America as possible. People want to know that someone recognizes that they are working hard for the association. Getting familiar and meeting in person is a huge step in that direction.
- Outreach to the association’s corporate members in an effort to garner support for increasing membership and participation within North America.
- Continue to come up with ideas that will help promote AACE, support involvement and increase membership and retainage of membership of the region.
Goals and Objectives:

- Promote dialogue and interaction between various Canadian sections to gain synergy in terms of sharing best practices, technical resources, presenters and job opportunities to strengthen and progress Region 1.
- Encourage women who work in project controls to take a larger role in leadership positions in administration of AACE local sections, as well as the International organization.
- Publicize the value of AACE membership and its advantages in terms of acquiring skills and knowledge not only from well-developed technical repository but also through getting connected to other members who can help and mentor through their practical experience.
- Advocate the value of acquiring various AACE International certifications to the project control community.
- Help AACE organization adapt and change to a new world where technology is going to play an important role in breaking barriers and connecting with future generation to advance the association in coming years.

Pranab Kumar Deb, P.Eng. PSP

Pranab Deb, P.Eng PSP PMP, has been a member of AACE International for over a decade and has been volunteering at AACE for the past 8 years, having started as a Section Board member proctoring exams and making arrangement for Section dinner meeting presentations. He has served the UAE Section as VP Membership and Marketing and as a member of the marketing team for the International Total Cost Management Conference in 2012 in Dubai, UAE. He is a project management/controls professional possessing over 15+ years of experience in engineering, procurement and construction project management including oil and gas, energy, commercial and heavy civil. In 2013, he moved to Edmonton, Canada, to work on a major refinery project as a Senior Project Controls Specialist. He started as a member at large supporting various board members in their activities. In 2015-2016, Pranab was elected as the President of the Edmonton Aurora Section. He started a webinar series for section members who cannot attend dinner meetings in person, certification training workshops at very subsidized fees and coordinated with other Associations in the Edmonton region to organize joint events. He also setup outreach events to the University of Alberta to initiate students into the project controls profession early on. He is also part of the Mentoring Success Advisory Committee and recently joined the Decision and Risk Management Subcommittee. Pranab is a Civil Engineer registered with the Association for Professional Engineers Alberta. He also holds the PSP from AACE and PMP from PMI. He is currently employed with Stantec in Edmonton, Alberta.

Goals and Objectives:

I would support all the grassroots efforts of the Sections that eventually contribute to the overall growth of the AACE.

- Improve communications between the AACE leadership and Sections/Region.
- Support efforts of the Sections in arranging joint meeting opportunities with other professional associations/societies like PMI, ASQ, CSCE etc.
- Organize and arrange at least a few webinars for the region from recorded Annual Meeting presentations.
- Create a pool of Subject Matter Experts in project controls, planning, scheduling, estimating, cost control etc., who can be contacted with specific queries. The SMEs would be listed in either a region based portal or section portal.
- Solicit section volunteers for AACE committee and boards and encourage Annual Meeting attendance. Spread the word/nominate members from the region for various AACE awards and the scholarship program.
- Assist struggling or inactive sections with support and advice from well performing sections in the region.
- Increase awareness of AACE certifications through advertisement, networking with recruiters, and presentations to technical colleges and universities in the area.
- Use social media extensively to enhance member communication, and advertisement of AACE events.

Bindu Amin, CCP EVP

Bindu Amin, MSc., MBA, CCP, EVP, PMP, is a seasoned Project Controls/Project Management leader with over 20 years Canadian and international experience in areas of project management, coordination and project controls in upstream and downstream projects in construction, oil sands and pipeline industry. She currently works for Husky Energy in Calgary, as Project Controls Lead and is responsible for capital projects in Oil Sands Business Unit. Her role involves managing a team of professional who are responsible for managing cost, planning and scheduling, progress management, change management for a number of projects going through different phases. Bindu has enjoyed being member of AACE International for over 14 years participating and contributing in a number of different ways. She has been an active member of Chinook Calgary Section serving the board as certification director for number of year before becoming Vice President and ultimately President for 2016-2017 term. She attributes her success to her open-minded attitude toward acquiring knowledge in which AACE has been a big contributor. As a new immigrant in Canada 2002, she credits AACE community whole heartedly for welcoming her with open arms and enriching her life both professionally and personally. She truly believes that joining AACE was the best decision she made several years ago and recommends it to anyone who asks for her advice. With her long association with AACE, she has inherent knowledge on the working on local sections as well as organization as a whole and she would use this knowledge to develop integrated strategy to advance the association in a wholesome manner to by connecting local sections better and using each other’s strengths to progress Region 1 collectively. With her collaborative leadership style, she will focus on learning new and improved ways to engage, connect and disperse these best practices to all the sections across Canada to implement.

Goals and Objectives:

- Use social media extensively to enhance member communication, and advertisement of AACE events.
W. Regis Fox, PSP
Regis Fox is a Planning and Scheduling Professional who has spent his entire career in scheduling and project controls for commercial construction, working for subcontractors, contractors, and owners, providing services from preconstruction through litigation. His portfolio of experience includes manufacturing facilities, secure government locations, museums, aviation, academic, entertainment, transportation, and mixed used development projects, valued at over $10 billion. As Director of Enterprise Scheduling for Clark Construction Group, he oversees the corporate Planning & Scheduling Department and works with project teams to implement best practices and effectively use technology to improve performance. Previously, he was Director of Project Controls for McKissack & McKissack, where he organized their project controls staff into a business unit providing standalone consulting services for existing and new clients. He is the Section President of the National Capital Section, he has a Civil Engineering degree from the University of Maryland, and he currently lives in Baltimore, MD, with his wife Kelly.

Goals and Objectives:
My goal is to be a voice for the sections on the Board and to connect our section leaders with one another to share best practices in section management, so that they can provide the best resources for our membership. I hope to bring a fresh perspective to the board from the generation that will be using AACE and its content for the next 60 years.

Omoniyi O. Ladipo, CCP EVP
Nyi has been an active member of AACE since 2005. She achieved Certified Cost Professional in 2007, and Earned Value Professional in 2010. Nyi has successfully recertified in both CCP and EVP. Ms. Ladipo has actively participated in the following positions of responsibility with the National Capital Section: Secretary; President; Past President; Board Director; Chair for Education and Scholarship Committee. From 2015 to 2017, Nyi actively participated as a member of the EVM Subcommittee, reviewing and evaluating technical submissions. Nyi is currently a member of the Marketing Advisory Committee reporting at the International level.
Ms. Ladipo was recognized by AACE as an Outstanding Woman in Project Controls in 2010. Nyi was instrumental in the organization of a select group of Washington DC Metro area middle school and high school Science, Technology, Engineering, and Math (STEM) students and their teachers, who were invited to attend a full day of events at the 2013 Annual Meeting including the keynote address and visiting the exhibit areas.
Nyi is a Program Manager for MBP, a multi-disciplined consulting firm. She has more than 30 years of experience in providing construction and project management, and is a leader in contracts administration and management, cost estimating, cost management and control, and earned value management. Currently, she is actively involved in two high profile projects, the Dulles Corridor Metrorail’s Silver Line extension of the rail transit system and the Architect of the Capitol’s Cannon House Office Building Renewal, both in the Washington, DC region.
Nyi has co-authored papers to include (Earned Value Analysis and CPM Schedule Review in Construction), presented this at an AACE Annual Meeting, and presented other topics at two AACE Region 2 Symposia. Ms. Ladipo co-authored Chapter 2 in the 2013 Construction Law Update and presented at other professional association conferences on topics related to Earned Value Management (EVM) and construction schedule reviews.
Nyi earned her Bachelor’s degree in Civil Engineering from the University of Maryland, College Park, and her Master’s degree in Construction Management and Economics from the University of Greenwich, London.

Goals and Objectives:
• As Region 2 Director, I will work closely with the VP Regions and others on the Board to implement the goals and objectives of AACE and support the Strategic Plan initiatives.
• Review current goals for Region 2 with my predecessor and enhance/align the goals with the Strategic Plan.
• Improve current outreach to future AACE membership through expansion of collaboration between AACE Sections and local public and private companies, and universities and colleges; through professional development, networking events, and student scholarship opportunities.
• Support all Region 2 Sections in promoting increased membership participation and growth. Encourage Sections to seek innovative approaches to increase membership’s participation in local and national events.
Maged El-Hawary, CCP EVP PSP
Maged El Hawary, CCP EVP PSP, is a certified Project Management Consultant with almost 20 years experience.

He has served as:
- President – UAE Section (2014-2016).
- Project Controls Director ASGC.
- Guest speaker and dissertation supervisor Heriot Watt University.
- Held several managerial positions in key international companies.
- BSc. Civil Engineering, P.G. Dip. Construction Mgmt, MSc. Construction Mgmt.
- Certified CCP, EVP, PSP and is a PMP with PMI.
- Professional speaker and panelist in many international conferences.
- Received the following international awards:
  - Charles Kean Distinguished Service Award – AACE International 2014;
  - Team Leader of the Year – 1st UAE PM Conference – SOE 2015.

Goals and Objectives:
- Promote AACE International’s name and activities among the region.
- Strengthen Region-07 existing sections.
- Improve the link between Region 07 sections.
- Frequent visits to different sections.
- Organize a yearly international event in the region lead by different sections leaders.
- Support raising starts in different sections.
- Increase membership numbers.
- Improve the interaction between AACE international and industry professionals.
- Open new links between AACE international and other professional communities/universities.
- Promote AACE International’s different certifications.
- Activate and support new sections (Jordan, Egypt...).  

Dev Tamboli, CCP PSP
Dev Tamboli, CCP PSP, has been a member of AACE International since 2009. He played a pivotal role in forming the Qatar Section, and was founding President. Under his leadership the section grew from 67 members to more than 170 members and became a major section within Region 7. He served as Committee Chair for several years on the Committee for Mentoring Excellence (CME). CME was instituted to foster mentoring among AACE members worldwide. He is a frequent author and presenter, having presented papers at AACE Annual Meetings and also at International Total Cost Management conferences. Dev holds three professional certifications including Certified Cost Professional (CCP), Planning and Scheduling Professional (PSP) and Project Management Professional (PMP). He enjoys serving as a trainer for the Qatar Section for CCP and PSP certification seminars. Dev has 15 years of experience in project controls. He works with Qatar General Electricity and Water Corporation for the Electricity Projects Department as a Projects Monitoring Lead, overseeing more than 100 projects, valued USD 6 billion. Dev is passionate about knowledge sharing and mentoring and believes in community service. He also led a cultural organization in Qatar conducting various cultural events and educational events.

Goals and Objectives:
Region 7 is the largest international region in the world and key to AACE growth and global expansion. AACE has untapped potential which is unexplored by many professionals in the region. As Region 7 Director, I would use my experience to strengthen sections and serve as a mentor for section leaders. Specific goals and objectives include:
- Establish close communication with members within the Region and the Board of Directors.
- Communicate AACE vision, mission, and strategic objectives to section leaders and members within Region 7.
- Promote awareness programs to make professionals aware about AACE International and its importance to construction and other industries.
- Increase awareness about importance of AACE certifications and their basis for job candidate selection.
- Expand AACE’s reach to various corporate giants and universities in the region to make AACE technical products and certifications a global standard.
- Help establish new sections in the region and grow existing sections.
- Work closely with the AACE board to implement and make successful AACE future plans in the region.
- Conduct regional conference on a large scale in the region for benefit of members in Region 7.
- Promote mentoring and other AACE initiatives by closely working with sections in the region.
Adam T. Althoff, PSP

Adam T. Althoff, PSP, has been an active member in the organization since receiving his PSP in 2012. He sees his largest contribution to date as the initiation of a local section in Omaha, Nebraska, in 2016. Adam has had the privilege of working for one of North America’s largest and most respected contracting and engineering firms, the Kiewit Corporation, for 10 years. All of which have been spent in the project controls field, currently serving as the Director of Planning and Scheduling.

Goals and Objectives:
- Currently leading the planning of what we are calling the "Midwest Regional Symposium" for April 2018. Geared at bringing together members who are not able to attend Annual Meeting but still have an interest in sharing knowledge and networking with their peers from Region 4.
- Continuing to reach out and attempt to grow the Omaha Section in my current role as Section President, with an emphasis on bringing young professionals to the group and educate them on the career long benefits of AACE.
- Foster the relationships built through this organization, as well as encourage continued additions and refinement to the greater AACE body of technical knowledge. Making every attempt possible to spread the word about the fabulous technical products and papers available to our peers.

Danilo Arba

Danilo Arba, has been an active member of AACE International since 2014, with over 15 years of project experience in the fields of Cost Control, Planning & Scheduling and Project Control on projects such as hydropower, high speed railways, FIFA World Cup Stadiums and other major infrastructure projects around the world. He is currently serving as President for the Italian Section of AACE International and Senior Planning Manager for Westfield Corporation. He is also the founder of DAV Consulting providing consulting to the construction industry and specialized software implementation. He promoted the creation of the Italian Section of AACE International during which he organized the first certification courses for CCP and organizing the first Italian Congress to be held in Milan on the 21 April 2018, all of which will be available in live streaming and the certification courses will be also available on demand.

He has lived and worked all around the world from South and North America to Africa, Middle East, South East Asia and Europe. He has also participated as a speaker in various AACE International events, including Peru’, Russia, Dubai and Brazil. He holds a Bachelor degree from the University of Lugano, Switzerland, and finished a full year course on Total Cost Management from the Italian Association of Cost Engineering.

Goals and Objectives:
I have been actively involved in AACE International since 2014. I have experienced first hand the benefits AACE can bring to your professional development and career.

My main goals are:
- Collaborate with universities, public sector and companies from all sectors that are not fully aware of the benefits of TCM and AACE International, and make them understand the benefits that this can have on their organization, both in small or large organizations.
- Continue the growth of Sections in Region 9 and the collaboration between them so that available resources can be better used for a greater benefit to all members of Region 9.
- Increase members of Region 9 both collaborating with complementary associations existing and present in various countries.
- Promote a coordinated program for all the activities of Region 9 and initiate a marketing/communication campaign to reach as many potential colleagues as possible.
WHY WOULD YOU GIVE UP YOUR CREDENTIAL?

Obtaining any one of these credentials takes hard work, time, and money. So why do some certification holders allow their credentials to lapse by not recertifying once every three years? This is a puzzling question that keeps popping up at each Certification Board meeting and one that the board members continue to debate: is there a better way to communicate to certification holders about the importance of certifications they have worked so hard to earn, and what it takes to recertify? The following is my attempt at communication.

As an EVP grading coordinator for exam memos, I'll occasionally run across someone that is AACE certified in the course of my travels and encourage them to volunteer as a grader since the more graders I have in my pool, the happier my life is. More often than not, though, I discover that the person has let their credential lapse which disqualifies them from volunteering. Using my root cause analysis skills, I find the reasons they let their certification lapse range from 1) didn’t think they earned 12 CEUs; 2) too expensive to maintain; or 3): didn’t provide the value they expected. For instance, since January 2010, 30% of EVPs have allowed their credentials to lapse for one or more of these three reasons, or maybe others. Within this group, some may have retired, may have moved on to other careers, or sadly, some may have left us for good. It’s understandable if those in this latter group no longer hold their credential; however, the ones in the first group are the ones the board would like to reach before they give it all up. So, if you’re on the fence about keeping the credential you worked so hard for, let me try and convince you to not only keep it, but how to enhance your credential and make it more meaningful.

Attaining the required 12 CEUs in a 3-year period has never been easier. Your CEUs can be acquired in four separate categories: Category A: Performed by employment; Category B: Professional Development by attending meetings and professional education; Category C: Industry Contribution by publishing or instructing; and Category D: Volunteer Service in various AACE activities such as grading, board membership, attending meetings, submitting exam questions, and mentoring. There’s a recertification handbook on AACE’s website to download to help explain the various activity you can use to claim CEUs; a video is also available to guide you through the recertification process. If you are at your recertification date and are worried you don’t have enough CEUs to recertify without re-taking the exam, check out the matrix on AACE’s recertification site and you might be surprised to learn you already have more than enough CEUs to recertify.

For those who have allowed their certification to lapse because recertifying was too expensive, $295 is no small chunk of change to come up with at one time. Add to that the cost of continuing education if you go that route to attain CEUs, and yes, it can be a hit to the pocketbook to keep up. However, the return on your investment should more than overcome your out of pocket expenses to keep your credential. Instead of think of it as spending $295 at one time, think about it as less than $100 a year, $2 a week, roughly the cost of a bottle of water each week. Research has shown that AACE cre-
dentialed employees earn more on average than non-certified counterparts, so is cost really a reason to drop the credential?

For those on the fence because your credential hasn’t provided the value you expected, then ask yourself, why not? Is it that your credential has little meaning in your present work environment or that it didn’t provide you a path to that promotion you thought it would? Or maybe you scored that promotion or new job with your credential and feel you no longer need it? What happens if you suddenly need to start looking for another promotion or a position at another company? Many employers and government entities include in their job postings that AACE certification is desired, if not required. As an EVP, I know I’m one of the 70% currently certified EVPs, and I like the edge that gives me because I realize that like all AACE certified professionals and technicians, I’m in a small, select group that many employers look at first when growing their workforce. And when I say look for, believe me, employers check the AACE certification registry, so if you’re one of those that have let your certification lapse and promoting yourself as AACE certified on your resume or job application, you’ll have some explaining to do, because once your certification lapses, you lose your credential as well as your place in the registry.

For most of us, our career is where the value of our credential really comes in. The advantages to keeping our certification is that we will earn more, enhance our professional image and our employer’s image, demonstrates our initiative, know what a select group we’re in, and improve our skills and knowledge through our continued education.

To those on the fence that are considering letting your credential lapse, how about instead try and enhance, promote, and make the most of it? There are many opportunities to volunteer within AACE to write exam questions, serve on regional and national boards, attend regional and national meetings, promote your credential by speaking within your company or at an academic institution, or mentoring other professionals within your profession. The more you make of your credential, the more valuable it becomes to both you and the rest of us as others become aware of the significance and value of all AACE credentials.

So before you let your certification lapse, ask yourself, why did I seek it in the first place and has it provided me with the value I expected? If not, then why? If it’s something that the certification board can do to provide that missing value, please let us know. Just go to the AACE website, click on the Contact Us tab at the top of the page, click on Certification, and let us know what we can do to help make your credential more meaningful to you, and more importantly, something you want to keep. Let us know, because you earned it, and we would like to see you keep it. ◆

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UPCOMING AACE ANNUAL MEETINGS

- 2018 Annual Meeting - June 24 - 27
  Manchester Grand Hyatt
  San Diego, California, USA
- 2019 Annual Meeting - June 16 - 19
  Sheraton
  New Orleans, Louisiana, USA
- 2020 Annual Meeting - June 28 - July 1
  Hilton Chicago
  Chicago, Illinois, USA

SOURCE DECEMBER 2017 15
Priyanka was born in India. Her childhood years were in India and then she and her family moved to Canada in 2002. Priyanka graduated with a bachelor’s degree in business management with a finance major from the University of Windsor in Windsor, Ontario. Upon graduation, Priyanka moved from Ontario to Alberta. Shortly after she moved to Calgary, she pursued a professional management certificate in construction management at the University of Calgary, this helped her to supplement her knowledge and skills required to further her career in project controls.

Priyanka reflects on her years at the university as they taught her the importance of cost and time management. When she moved into project controls, she carried forward the learning. Priyanka worked as teaching assistant during the weekdays and she also worked on the weekends while managing a full time course load. This experience helped her to become independent, responsible, organized, and focus driven.

Over the years, Priyanka has been involved with several projects from early FEL planning to execution with TIC. These projects ranged between $1MM to multi-billion dollars at various stages of the project life cycle. Her career goal is to embrace every opportunity to be passionate about, as well as involved, while sharing her skills and learning from others.

Priyanka currently works as a project controls lead for capital projects with ConocoPhillips Canada. Her training over the years in project controls enabled her to get the PMP certification in 2016, and she is currently working toward CCP certification through AACE International.

Priyanka has been an active member of the Chinook Calgary section for the last five years. Over the years she has attended several dinner meetings conducted by the Chinook Calgary Section and earlier this spring she completed the CCP preparation course.

Priyanka’s responsibilities include management of cost, schedule, and change management through various stages of the capital projects. Two years ago, she was given the opportunity to move into the cost lead role where...
she manages a team of project controls professionals who support different phases of the projects. Her company has gone through lots of changes in the last couple of years but it has only created new opportunities for her. Her company has always been supportive of her career aspirations and has encouraged her to pursue training, it has provided challenging work assignments and she has found invaluable mentorship opportunities.

Priyanka’s project controls journey started as a junior scheduler responsible for assisting the senior planner with updates for schedules in P6. She would then compile project reports as part of a core team for an EPC company. Priyanka believes that this was a great learning opportunity as she interacted with various disciplines to get their inputs and she learned the role of each function. Consequently, this led to putting all the pieces together and providing a complete view of the projects. Priyanka believes she has been very fortunate to work with great experienced co-workers who have always encouraged and supported her learning.

After a few years, Priyanka moved to a cost control team and took up a site assignment at the Shell Scotford site in Fort Saskatchewan, Alberta. She was working closely with the project manager, engineering leads, project services personnel, and contractors. This helped her develop a strong understanding of work breakdown structures and coding, as well as planning and scheduling, forecasting, and management of change processes that are required for the successful execution of a multi-billion-dollar project.

The majority of skills that Priyanka learned have come from her job experiences. Priyanka says that with the acceptance and demand for project control professionals, courses have been provided by institutions and professional associations have emerged over the years to support the industries. A great example of this is AACE International.

Priyanka draws her inspiration by trying to make a difference, knowing that she has helped the project succeed and she has contributed toward improvement of the organization. Priyanka believes that all professionals need to have strong skills and learn to incorporate the best techniques and methods in order to strengthen ourselves. After all, she says we are the gatekeepers of the project and the eyes and ears for the project managers.

All along her career path, Priyanka has always believed in the importance of learning from others and taking the best of all skills and incorporating them into our career journey. She has accomplished this through leveraging mentorship opportunities inside and outside of the organizations she has been involved with. Over the years, Priyanka has been very fortunate to have had the opportunity to work and learn from a lot of experienced project controls professionals that have helped her steer her professional growth.

Earlier this year, Priyanka attended a dinner meeting at the Chinook Calgary Section where John Zhao was the key speaker. John presented a topic on the “Future of the Oil Industry and Alberta Jobs.” The event was well attended and well received through active participation among the members. Priyanka was particularly impressed with his research and relevance of some of the issues and solutions. The topics presented in the dinner meetings are based on current issues and practices within industry.

Priyanka says that AACE International has added value to her professional development through training and seminar opportunities, available certifications, as well as technical products and resources. Priyanka believes AACE certifications and the association per se differentiates professionals from others as a validation of superior skills and knowledge. She believes membership and certifications with AACE International adds a lot of weight to a job application and very often gets mentioned during a job interview.

Priyanka gives a lot of credit for her career journey to AACE International, from providing reading materials on the best industry recommended practices to networking opportunities through technical dinner meetings. Professional development, certifications, continuing education, and networking are the primary reasons why she joined AACE. She advises members to always encourage new graduates to get involved with AACE early on as one can certainly gain benefits both personally and professionally.

One of the most important lessons Priyanka has learned is not to view risks simply as being risky. Priyanka says: “there is so much out of our control and if we just keep doing what we did yesterday, we can’t get ahead. By taking a risk, you are putting yourself in a position to learn, whether you succeed or fail. Don’t be afraid to put yourself out there and learn along the way. It takes a lot of energy and self-motivation, but if you have a clear message and you continue to charge forward you will then have an impact. Invest in yourself, invest in your career, and engage in associations related to your career path.”

“Priyanka says that AACE International has added value to her professional development through training and seminar opportunities, available certifications, as well as technical products and resources. Priyanka believes AACE certifications and the association per se differentiates professionals from others as a validation of superior skills and knowledge.”
The AACE International Australian Section was very proud to host its first regional conference, the Project Controls Conference 2017 (projectcontrols2017.com.au) from 20–22 September in Sydney.

The event was co-hosted by the AACE Australian Section and Engineers Australia’s Risk and Cost Engineering’s Technical societies.

Australia is currently facing a significant increase in transportation infrastructure projects, particularly in Sydney, so the event was ideally timed to showcase developments in project controls. The conference provided an invaluable opportunity for over 260 delegates to learn from a diverse range of industry leaders and develop their skills and knowledge in the interest of improving the outcomes from their projects.

The conference showcased developments within project controls across all industries and sectors, and helped company owners and executives to understand how their businesses could be influenced to improve efficiencies and productivity. The audience included engineers, project managers; project controls managers and project controls practitioners.

Masterclass Workshops

The first day of the conference kicked off with a series of six half-day masterclass workshops – which included three very popular workshops by AACE International professionals:

- Jim Zack CCM CFCC FAACE FIGPC FRICS PMP - Management of Complex Construction Claims.
- Lance Stephenson MRICS CCP PMP - The Application of the Six Elements of Project Controls.
- Santosh Bhat, PSP - Schedule Risk Analysis in Action.

Feedback from these workshops was very positive. We are particularly grateful to Jim Zack for having travelled so far, to prepare and deliver such a valuable workshop for attendees.

The Conference

The conference was opened by Engineers Australia Sydney Division General Manager Greg Ewing. Greg thanked delegates for attending and acknowledged the traditional owners of the land the attendees were meeting on, the Gadigal people of the Eora nation. He recognized their continued connection with the land, waters and community and paid respects to them and their culture, and to their elders past and present.

Greg described how the traditional owners have been gathering and exchanging stories on this land for thousands of years and expressed gratitude that the project controls community was also able to gather, exchange stories, and share learnings on this same land.

Following Greg’s introduction the chair from the NSW Chapter of the Risk Engineering Society, Pedram Danesh-Mand, and the Chair from the NSW Chapter of the Australian Cost Engineering Society, Steven Bird, welcomed attendees to the conference.

The first two keynote presentations focused on the softer side of project delivery and control. Attendees heard from Lendlease CEO Dale O’Connor who spoke about the importance of leadership, teams and people and his presentation was followed by Chris Lock who talked about the importance of culture in the workplace to ensure success in project delivery. Chris’s presentation demonstrated how culture can be measured and he explained how these measurements empower organisations to set targets for culture change initiatives and periodically monitor progress away from defensive and
aggressive styles toward more constructive behaviors.

For the final keynote of the first day, Dr. Andrew Harris introduced a number of innovative concepts. Dr. Harris leads a centre of excellence in strategic innovation at Laing O’Rourke. The purpose of the group is to develop strategic innovations to improve safety, quality, productivity and profitability. Andrew’s presentation included practical commercial innovations in virtual and augmented reality, construction-scale 3D printing, intelligent infrastructure, next-generation health and safety technology such as scanners that detect whether workers are wearing appropriate PPE.

The conference then broke out into the technical seminar streams covering people, process and technology and incorporated a number of engaging panel discussions.

The final morning of the conference provided delegates with a smorgasbord of thought leadership. Attendees were honored and privileged to have engineer and NSW member of Parliament, Dr. Mehreen Faruqi, deliver an inspiring opening keynote presentation.

Mehreen reflected on her own life experiences and explored that engineers can do “anything and everything” encouraging engineers to get involved in politics. She explained that politicians are usually lawyers, bankers, or career politicians and they are making big decisions on engineering projects so clearly there is a great opportunity for engineers to be represented in government so that better outcomes can be achieved for the community. Mehreen would like to see engineers more involved in the early stages of project analysis and selection and emphasised the importance of giving frank and fearless advice on risk and contingency assessment.

Following the inspiration from Mehreen, attendees received some grounding words of wisdom from AIPM CEO, Yvonne Butler, implored the importance of competency and certification for project professionals. She believes this particularly applies to the project controls profession as it has the opportunity to establish standards and help improve project performance and reduce waste in resources. Yvonne explained that these savings could then be put back into the economy and used for much needed infrastructure such as hospitals and schools therefore bringing greater benefits for the wider community.

Marion Terrill from think tank, the Grattan institute, then reinforced many of Mehreen’s and Yvonne’s messages with some enlightening analysis of cost performance on Australian public transportation projects.

Adele Eagleton talked about the benefits of diversity in engineering and project controls and AACE International President-Elect Alexia Nalewaik, CCP FRICS, delivered a great presentation on performance audits before joining the all-star panel discussions.

In addition to the impressive range of speakers the event also provided great opportunities for networking with like-minded professionals with exhibitors, government, industry and academia all well represented.

Thank-you

The Australian Section would like to thank all speakers and delegates for their attendance. Feedback from delegates has been overwhelmingly positive and has provided the section with some helpful insights to ensure our next event is even better. In particular, the section would like to thank AACE International’s Jim Zack, CCM CFCC FAACE FIGPC FRICS PMP, Lance Stephenson, MRICS CCP PMP, Santosh Bhat, PSP, for their masterclass workshops and thank Dr. Alexia Nalewaik. CCP FRICS, for her keynote presentation and panel contribution on the final day.

The Section is very grateful to the team at Engineers Australia for supporting the business case for the conference and providing organizers with planning, marketing, administration, guidance and advice throughout the event management process. Thank-you also to AACE International HQ for their valuable support in planning and marketing.

Thank-you to the organizing committee of Steve Bird, Pedram Danesh-Mand, Nolan Bear, Abhi Datta, CCP, Geoff Hurst, Santosh Bhat, PSP, and Ali Nami, PSP.

The Section would also like to thank our generous sponsors Ineighit, Ecosys, Aquenta, Monitor, Project AI, Aconex, TBH, Helmsman, Jacobs, Monash University, Resodel Software, Edsico, PMWeb, PMO Solutions, QA Software, Prescience Technology, Australasian Project Planning, Engineous, Envision, Procure, Palisade, Red Arrow, Supertech Project Management and Synchrony.

Last but not least we would like to thank the International Convention Centre - the venue was spectacular! If you missed out on the Project Controls Conference don’t despair, Sydney will also be hosting the International Cost Engineering Council at the same venue in November 2018.
Of Quantum Shades of Gray—
A Dilemma for the
Expert Witness

Jeffery L. Ottesen, PE CFCC PSP; Kenji P. Hoshino, CFCC PSP; and Greta Martin, PE PSP

Abstract: Testifying as an expert witness involves resolving many conflicts, both external and internal. This article discusses one of the internal conflicts. Conveying objectivity is paramount to maintaining credibility with lawyers, judges, and other decision makers. Arguments exist that there is often an implicit understanding between the hiring client and the expert that the expert will find a way to leverage the client’s strong positions, and minimize or negate the weaker ones. Consequently, the expert is often caught in an internal conflict between performing objectively on one hand and meeting the client’s expectations on the other. When does an expert cross the line (assuming it exists) from ‘objectivity’ into unwarranted advocacy? This article presents one paradigm in effectively dealing with this conflict in a way that allows the practitioner to stay true to the AACE Canons of Ethics.

Construction projects levy significant monetary risks upon contractors and owners alike. With so many moving parts and pieces, disputes arise and sometimes require litigation to settle them. In these instances, experts may be retained to assist the triers of fact in understanding technical matters pursuant to them making a correct decision. With so much at stake, pressures mount and can cloud judgment and influence behaviors. The expert’s role is to objectively perform analyses and to present results without influence by these pressures. Sometimes, however, the expert finds themselves swept up by the current of advocacy and must find a way to retain impartiality.

This article first presents the wide range of current views of expected ethical professional conduct of experts and then provides the practical circumstances which give rise to the divergence of views and the internal conflict they generate for the expert. Resolution of these potential conflicts is framed in a model of varying shades of gray. Because experts are just that — experts in their fields—they have the ability to see facts, assumptions and evidences with greater acuity, (i.e., with greater ability to distinguish between varying shades of gray, than a lay person such as a juror or trier of fact). The primary objective of this article is to educate all parties in better understanding how each views their respective shades of gray with intent to resolve possible conflicts between objectivity and advocacy, and thereby to align the parties’ views pursuant to settling disputes.

A Professional Performance Standard

The AACE Canons of Ethics speaks to the professional performance of experts and those who express an opinion on cost engineering or cost management:

“AACE International members shall uphold and advance the honor, dignity and practices of cost engineering and cost management. In keeping with the high standards of ethical conduct members shall:

• be honest and impartial
• serve employer, clients, and the public with dedication
• strive to increase the competence and prestige of their profession
• apply knowledge and skill to advance human welfare
• ensure adherence to health, safety, and welfare standards

Specifically, the Canons require (in part) that members:
• Be objective and truthful in professional reports, statements, or testimony, and include all relevant and pertinent information in such reports, statements, and testimony (I.11).
• When, as a result of their studies, members believe a project(s) will not be successful, or if their judgment is overruled, they shall so advise their employer or client (II.4).
• Admit and accept their own errors when proven wrong and refrain from distorting or altering the facts to justify their decisions (II.17).
• Not request, propose, or accept professional commissions on a contingent basis under circumstances that compromise their professional judgments (II.15).
• Be dignified and modest in explaining their work and merit and avoid any act tending to promote their own interests at the expense of the integrity, honor, and dignity of the profession (I.4 and II.11).
• When serving as expert witnesses, express opinion only when it is founded upon adequate knowledge of the facts, upon a background of technical competence, and upon honest conviction (I.5).
• Use no statements, criticisms, or arguments that are inspired or paid for by an interested party without proper disclosure otherwise (I.6).
• For most professionals, abiding by these Canons is commonplace, but even for the impartial experienced expert, conditions arise that may challenge the expert.

Objectivity Challenged by a Court Decision

In contrast, the public, including the courts, see expert witnesses in a dimmer light. For example, in Lambert v. Carneghi, the appellant-client, Lambert, sued respondent-experts Carneghi and Dailey for negligence over their alleged failure to adequately advance the client’s position in a fire insurance appraisal proceeding [15]. The appeals court held that the litigation privilege does not apply to prevent a party from suing his own expert witness, even if that suit is based upon the expert’s testimony. The dilemma for the expert implied by this decision is whether or not the expert is ever allowed by law to act impartially, or whether the expert has a duty to advocate on behalf of its client. The court’s reasoning arriving at its decision supports the latter position as can be seen in a few significant excerpts from the decision:

“. . . the reality that an expert retained by one party is not an unbiased witness to begin with and that threat of liability for negligence may actually encourage more careful and reliable evaluation of the case by the expert…”

“Further, professional experts derive a substantial portion of their income from this line of work, and their reputation for honesty and integrity would logically impact the frequency of their future retention as expert witnesses.”

“Finally, we are not concerned that our refusal to extend the litigation privilege to a party’s own expert will negatively impact the integrity of the judicial process. Again, experts retained by a party are partisan witnesses, and we fail to see how permitting them to be sued would undermine the judicial process any more than permitting attorneys to be sued by their own clients.”

According to the last quote, this court apparently believes that there are no objective expert witnesses, a point that AACE International, other organizations such as Forensic Expert Witness Association (FEWA), and the authors of this article dispute. FEWA issued a response to the California Supreme Court exposing the untenable conditions this decision places on testifying experts:

“The appellate court decision places experts giving testimony in this state in an untenable position by forcing them to act as advocates for their clients litigation arguments rather than serving their intended role of providing the trier of fact with unbiased testimony on subjects that are beyond their knowledge and everyday experience. It also would create extraordinary pressure on experts to slant or shade testimony to be as favorable as possible to the party who retained the expert, perhaps to the point of exaggerating or distorting the expert’s true opinions. At the very least the appellate court decision would place the expert at risk if he or she did not succumb to the client’s pressure to “tailor” his or her testimony to the client’s theory of the case.”

Consider formal litigation from a first-time juror’s common-sense point of view. He believes that a legal dispute is about determining who is right and who is wrong, but the facts presented by the parties present a world of grays, not a simple black and white one (see Figure 1) [9].

One expert reports in favor of the plaintiff and the other expert calls it in favor of the defendant, both experts predictably favoring their respective clients. The juror thinks both experts must be, at best, arbitrary and at worst, mercenary advocates like their clients’ respective attorneys. He may simply throw out both opinions from opposing experts and come up with his own, perhaps misguided, opinion, for example by ‘cutting the baby in half.’

This dynamic is so well known that the expert is often retained purely for the purpose of offsetting the known one-sided testimony of the opposing expert in a complex trial. Fearing the penchant for the trier of fact to ‘cut the baby in half,’ the client-attorney directs the expert to skew the opinion one-sidedly in the opposite direction. The hoped for result is akin to the cold-war era strategy of mutual assured destruction in which the trier of fact
discounts both experts and rules based on arguments of equity and law presented by the attorneys. The experts are essentially hired to nullify each other. The net effect is zero. The authors believe this state of affairs fails to “advance the honor [and] dignity” of the profession and hinders equitable and efficient resolution of construction disputes.

Indeed, most expert retention occurs on complex projects where the facts fall into gray areas rather than where a clear black and white picture of right and wrong exists. Easy cases settle without involving experts and attorneys while the more difficult ones find their way into litigation and into the experts’ hands. Closer examination of the ‘gray area’ provides a basis of better understanding the conflict between objectivity and advocacy.

Roles of the Court, Counsel and the Expert

Preliminary to this examination, one must first understand who the players of the formal dispute resolution drama are and the roles each plays. Apart from the plaintiff (claimant) and the defendant (respondent) who are the parties to the dispute, the primary players involved in litigation include the court (e.g., judge, jury or tribunal), attorneys and experts. Each plays a particular, distinct and predetermined role.

The court belongs to the judiciary branch of the government whose task is the adjudication of controversies over the application of laws in specific situations [5]. The judiciary ensures proper and fair consideration of evidences for plaintiff and defendant, as presented by each party’s lawyers. If technical matters of the trial surpass the knowledge and expertise of the court, then experts are retained to testify. Such practice has existed since the mid 1500's under British law which has carried over to US law [18].

The role of the lawyers is to represent the client by advocating and arguing matters of law [18]. Within bounds of the law, their loyalties reside only with the client. As part of their professional obligations, lawyers search for evidence that supports their client’s case [17]. Lawyers gather and present evidence to support their client’s case, and also sometimes retain experts for the purpose of assisting the court in making decisions regarding the conflict.

The role of an expert differs from the lawyers and the court. The role of the expert is not concerned directly with matters of law, nor does he argue matters of law, but rather gives views and opinions on matters of technical expertise on behalf of the client impartially and independently as necessary [18]. Aiken explains:

“Expert testimony is the testimony of persons who are particularly skilled, learned, or experienced in a particular art, science, trade, business, profession or vocation, a thorough knowledge of which is not possessed by the public in general. It is almost universally recognized that "[i]f the court or jury is able to draw its own conclusions without assistance of expert opinion, admission of such testimony is not only unnecessary but improper [3]."

The trial judge is required to make a "preliminary assessment of whether the reasoning or methodology underlying the expert's testimony is scientifically valid and of whether that reasoning or methodology properly can be applied to the facts in issue." If the reasoning or methodology is not valid or applicable, then the opinion evidence is not relevant and will not be admissible [10].

Initially, in 1993, in Daubert v. Merrell Dow Pharmaceuticals, Inc., and then later by amendment in 1997 in General Electric v. Joiner, the US Supreme Court clarified responsibilities of the trial court regarding expert opinion [6, 8]. Under the U.S. Federal Rules of Evidence Rule 702 (the rule that controls admission of expert testimony in federal courts), the trial court is directed to determine whether the methods used by an expert and the principles upon which his analyses rest are reliable, and whether the witness has applied the principles and methods reliably [20]. The court is not interested in which party wins the case; it only cares about making the correct decision [7]. Rule 702 “Testimony by Experts” indicates:

“If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.”

The expert’s objective then is to analyze the possible positions using the facts and data with reliable principles and methods, and then to present the results in a way that will assist the court in understanding the results. Further, the opinion must be helpful and make a positive contribution toward the court’s understanding of the facts, not impede it. The authors posit that expert opinions that are diametrically opposed and presented as such, given the same set of facts, are not helpful to the court.

Prior to forming an opinion, the expert must collect relevant facts which establish a foundation for the expert opinion. Typical tasks for a forensic scheduling expert include the preparation of a chronology of events relevant to the case and arguments, verification that the events occurred, weighing the relevance and importance of these events and determining the factual causes for the events and their apparent consequences. Through interpretation, the expert provides opinion evidence to the court to assist the court in making its decision [11]. As such, the expert must understand what constitutes opinion:

“In the law of evidence, opinion is an inference or conclusion drawn by a witness from facts some of which are known to him and others assumed, or drawn from facts which, though lending probability to the inference, do not evolve it by a process of absolutely necessary reasoning [4].”

The court then takes the opinion and ties it to elicit the truth. It is in the
interpretation and evaluation, or in the language of Rule 702, “the application of the principles and methods reliably to the fact of the case” where shades of gray come into play.

**Acuity for Shades of Gray**

The expert, having both education and extensive experience in the subject matter, has the acuity for many more shades of gray than those without that experience and education, such as the judge and the jurors (see Figure 2).

The middle gray zone is much narrower when additional shades are introduced as shown bounded by dotted lines as in Figure 3.

Figure 3 demonstrates that the window of uncertainty on either side of the imaginary center line is wider where there is only one gray value as opposed to where there are many. Practically speaking, a call in favor of the plaintiff (black) or defendant (white) that may seem arbitrary to the untrained eye is, in fact, objective to the trained eye who can discern more shades of gray.

The “x” in Figure 4 represents the finding of fact. In the version with only one shade of gray, one cannot make a distinction on how gray the “x” is compared to “y”. Should the expert call “x” in favor of the defendant, represented by the white end of the spectrum, the call may seem arbitrary since the “x” is just as gray as “y”, but still in the same gray area. But in the version with many shades of gray, one can make an objective call that the “x” leans towards the defendant (white) because its shade is distinctly different from that of “y”.

**Finding Fellowship in Gray**

True objectivity assumes that there is agreement on the number of shades of gray, the width of the middle zone, and the position of the center line. Arguably, an expert can possess a skewed personal standard that places the center line somewhere deep into the white territory that allows him to make the call in the plaintiff’s (black) favor. Although this does qualify as opining “upon honest conviction,” because it is extremely unorthodox it is not helpful to the trier of fact [19].

The standards and practices vary, sometimes widely, among different experts, so how can common ground ever be found among them? Quite literally, renowned photographer Ansel Adams, devised a methodology for his profession to control contrasting shades of gray in black and white photographs [16]. The zone system, as it became known, was a convenient reference for
any photographer who wanted control over the photo negative medium. Adams created a zone scale with 11 different zones, or shades of gray including pitch black on one end and snow white on the other, as shown in Figure 5, so that optimal contrast and detail could be shown in photographs. Experts should likewise seek to find or establish standards that bring themselves to agree on a “middle gray zone.”

There are at least two areas of practice where the gray scale paradigm is useful. One is the general, methodological area of practice which will be called simply the “General Grays.” Various industry standards, best practices and recommendations fall in this category. The other is the specific, factual area of practice specific to the particular dispute for which the expert is engaged. This will be called simply the “Specific Grays.” The evaluation of the facts, assumptions and evidences of the case fall into this category.

General Grays fall squarely in the requirement of US Federal Rule 702 that the expert opinion be based on reliable principles and methods. Whether a principle or method in any specialized area of study is reliable or not is usually evaluated by the level of agreement on their reliability by the peer practitioners and scholars in the specialized area of study. This can take the form of explicit peer review or simply by common practice of the industry. It is a community standard, however small that community may be. It is one of the expert’s roles to assist the court to see with conviction that the court’s decision aligns with the common industry understanding of the circumstances. Various industry standards, best practices and recommendations constitute the body of knowledge commonly referred to as normative science, or rather, the best understanding of truth for that field at that time [14]. Those resistant to emergence of such standards ostensibly choose not to be persuaded away from their own predetermined interpretations of gray. History shows, however, that over time most of these dissenting opinions are silenced by the collective voice of the whole. Stated another way, with accepted standards the subtleties become discernible to the parties, thereby bringing fellowship to the interpretive grays.

A good example of such a document is AACE’s Recommended Practice 29R-03 “Forensic Schedule Analysis” [2]. The shades of gray do not correspond to the nine delay analysis methods itemized in RP 29R-03, but rather to the specific ways in which each of them can be used, implemented, and evaluated. The grays in RP 29R-03 correspond to the variables and factors that must be considered in implementing those methods. By conditional evaluation of each method, as implemented, RP 29R-03 provides a common understanding and alignment on what constitutes a “middle gray zone,” if not the exact center line for each method.

Methodological standards that do not discuss the variables and factors attendant to the practical use of the method(s) do not provide a gray scale, and is therefore of limited use in real life practice. Any unconditional value judgments of the methods in the absence of the variables and the factors is analogous to seeing the world in pure black or white without the benefit of the grays and should be treated with extreme professional caution. An important factor to note in evaluating robust standards that do address shades of gray is the assessment of the width of the middle gray zone. In other words, is it a very narrow and strict standard or does it allow considerable leeway for staying within the standard industry practice? Therefore, the expert should not only be familiar with the existence of the various standards, best practices and recommendations, but also be intimately knowledgeable and up-to-date on them even if, or perhaps, especially if they contradict each other.

The “Specific Grays” are relevant in the evaluation of the facts of the case in the form of documents, data and other evidences within the framework of a given method which was the subject of the “General Grays”. The facts are evaluated and organized on the gray scale continuum, always cognizant of the midpoint which is used to call the collective grays to one side or the other. The midpoint is always fact driven and not easy to determine mechanically. It is often a mix of expert experience and community, or industry wisdom. For example, the uninitiated would think that by mixing a tablespoon of black paint with a tablespoon of white paint will yield middle gray. In fact it yields a very dark gray. Or, one would expect the middle gray to have a 50 percent reflectance value reading on a light meter. It does not. A 50 percent reflectance reads to the eye as too light. A middle gray accepted by artists and photographers have an 18 percent reflectance value resulting from educated ‘eyeballing’ by the members of the user community like Ansel Adams.

As stated earlier, industry standards serve as a good starting point for a consensus on the “General Grays”. Similarly, a limited meeting of the minds, if not a consensus can be reached by some procedures used in international
jurisdictions. For example, a tribunal may order pre-hearing meetings between opposing experts in order to arrive at a jointly prepared list of points of agreement and disagreement, or in this context, defining the grays, prior to trial thereby allowing better use of time at the hearing. Given such an opportunity, the experts may find that all the troublesome gray areas rest in entitlement issues involving contractual and legal positions which typically fall outside the scope of the expert’s scope of opinion.

Does It Really Matter?

Depending on the source, the human eye can distinguish anywhere from 30 to 500 shades of gray [13]. In the visual arts, richness of the gray scale is considered a good thing, but, when it comes to arguments, the gray areas are often seen as complications or useless hair-splitting and triers of fact tend to prefer judgments based on a black-and-white basis. This is especially true for subject matters in which the person making that judgment has no familiarity such as members of a jury, judges and arbitrators, and yes, often attorneys. The expert must be mindful that most lay people cannot perceive as many shades of gray as the expert, but also know that ‘hair splitting’ is forensically important. Consider examples from a completely different field: gold medalist Michael Phelps winning by one one-hundredth of a second, or NASA’s calculation of a re-entry trajectory that could have serious effects on its astronauts. Hair-splitting variations in an expert’s interpretations can likewise result in multi-million dollar swings in final rulings. Remember that but for the arguments falling into the gray area, the case may have settled before calling experts and attorneys.

If the goal is the ability to objectively make close calls that teeter on the middle, is it just a matter of defining more and more shades of gray to narrow down the width of the middle gray zone until it is indistinguishable from a center line? Not always, but there is no single way to predetermine when the diminishing point of return is reached because each case scenario is unique, and each court, lawyer, or client is likewise different. Testifying to a cumulative impact claim provides an example of where an expert must make such a call. Such claims require significant evaluation of many facts, assumptions and evidences, which equates to interpretation of many shades of gray. The sheer complexity of the facts and issues exponentially increase the number of shades and put the onus on the expert’s skills to educate the court. In order for the opinion to be helpful it is not enough to point out the many shades of gray. The expert must make a call on which way the shades of gray lean—either to the black or white side of the spectrum. Of paramount importance is that the opinion is reliable. That means accuracy, not necessarily precision. An opinion based on a calculation to the precision of a 10th decimal place is still unreliable if the answer is wrong.

Optimizing the number of evaluative shades of gray differs from determining how much factual detail to delve into or how much source data to examine. While there are practical limits, there is no substitute for detailed and thorough investigation of facts. There is no downside to fine granularity and completeness of investigation other than time and money. However, delving into fine details is not for the faint of heart because typically, the finer the detail the grayer the picture. In other words, in a typical construction dispute that which appears on the surface to be a clear cut case becomes increasingly muddy with the examination of more documents and data. It is the attorney’s duty to discourage the muddying of a picture that clearly points in the client’s favor. The expert’s duty is to objectively answer the question asked. It is up to the client-attorney to ask the question and to limit the scope of opinion in such a way that the answer, in the form of a well-reasoned expert opinion that does not muddy the picture, even with a full investigation of the facts. The competing interests of the attorney/advocate and the impartial expert can be reconciled by following the “Less is More” philosophy of expert reports and opinions by narrowing the scope to the necessary minimum [12].

There is also the thought that the expert need only review the minimum amount of data to generate an opinion, in the interest of cost savings to the client. There is a minimum threshold of information, however, that the expert must see to even to begin to understand the gray areas of the case. That threshold varies from assignment to assignment based in large part upon the reliability and completeness of the data. But it is clear that an expert’s impartial use of multiple sources of reliable information to arrive at the opinion is better than a reliance on a single source regardless of its perceived completeness, precision or favorable content. Simply put, the margin of error inherent in the opinion cannot be determined using a single data source. Therefore, it behooves the client-lawyer to allow sufficient latitude and access to all non-privileged information to allow the expert to do his job.

Presenting the Grays

Assuming that the opinion is based on a competent analysis, there’s no requirement that the presentation must be prepared with the same amount of extensive detail used in the analysis. If the expert is presenting before a jury panel which is, apparently to all, wishing for simple explanations, catering to that wish the client attorney or the judge may direct the expert to compress the results of a complex forensic analysis into a very short testimony window. There are as many styles in achieving this simplification as there are experts. One method, not recommended, is to oversimplify the extensive detailed analysis by presenting it as if it was actually a simple black-and-white matter, ignoring all the grays and call it in the client’s favor. The other side will likely do the same in an effort to nullify. This is not ‘helpful’ but often admitted for testimony because the unhelpful nature is apparent only in hindsight, after testimony.

Another method that appears to have more than justified frequent success is to emphasize the expert’s experience, qualifications and charm, the enormous amounts of data reviewed and the extensive hours involved in the analysis, then go straight to the bottom line opinion. The only gray the jury sees may be the color of the expert’s hair. As seen in electoral politics this often works. But it does very little, if anything, to advance the credibility or the integrity
of the industry. The authors’ prefer to use the “many shades of gray” paradigm explicitly in aiding the trier of fact to navigate through what appears to them an impenetrably vast middle gray barrier. In our experience, when given an easily understood visual or conceptual paradigm, the trier of fact invests time and energy into examining the details underlying the analysis. Once they understand the reasoning and see that the reasoning is sound, (i.e., once they can discern the same shades of gray, they are likely to rule in the favor of the one who provided that reasoning).

Conclusions
Without exception, the expert owes the client his or her absolute best work. That ‘best work’ is defined by the duty it owes to the court to provide meaningful assistance in understanding technical matters in furtherance of the court’s pursuit of making a correct ruling. This duty requires that the expert act honestly, impartially and thoroughly, and discern between varying shades of gray when considering all facts, assumptions, and evidences on a case. The expert must then convey those interpretations to the court in a way that the trier of fact will understand and hopefully agree with the ultimate opinion.

The other important client served by the expert is one’s own credibility. By conscientiously analyzing all positions using the facts and data impartially and by employing reliable principles and methods, the expert establishes sustained credibility, stature in the industry and professional longevity.

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9. Grammarist.com: ‘gray’ and ‘grey’ are different spellings of the same word, and both are used throughout the English-speaking world. But gray is more common in American English, while grey is more common in all the other main varieties of English. In the U.K., for instance, grey appears about 20 times for every instance of gray. In the U.S. the ratio is reversed.
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Houston Gulf Coast Section

On Sept 12, the Houston Gulf Coast Section welcomed Waylon Whitehead from ConocoPhillips as speaker for the monthly section meeting technical program. Waylon’s topic was, “The Monte Carlo Method for Modeling and Mitigating Systemic Risks”. Many references have been made in literature about the supposed inability of Monte Carlo Simulation (MCS) methods to represent systemic risks to project cost and schedule. Mr. Whitehead presented a method of combining typical MCS methods of representing uncertainty and project-specific risks with systemic risks using the Risk Drivers Methodology.

Montreal Section

The Montreal Section kicked off the new season on September 26 with a special meeting and the annual tradition of sharing some highlights of several papers presented at the AACE International Annual Meeting which was in Orlando, Florida, in June.

The following papers were highlighted by delegates who were in attendance:

Philippe Toren and Sabrina Lord of Revay and Associates summarized some highlights of Project Claims Avoidance for Owners by Chris Caddell and Andrew Aston.
Owners by Chris Caddell & Andrew Aston. This paper explained how claims avoidance starts early through the selection of contracting strategy, negotiation and scenario playing and continues through execution with various techniques, data, documentation and change management. The recommended practices outlined can be used to minimize the probability of claims and lesson the impact should they occur.

Michael Guevremont of Hydro-Quebec provided highlights from his paper titled, Virtual Construction Management. The paper discusses a recently enhanced virtual 4D scheduling practice on two new facilities with significant benefits. The latest simulations included equipment, just-in-time handling, space identification and reservation, distinct trade and contract identification in addition to traditional type sequencing. Michel described these new developments in Building Information Modelling (BIM) and explain how this assisted home office with strategic decisions and the site team with operational considerations.

An author from Hatch joined the presentation from Vancouver via teleconference with a virtual presentation of his paper, Proactive Trend and Change: Avoiding the Iceberg Effect. Some highlights included the key critical controls for best practices for trend and change management while describing the “iceberg effect” and how to avoid it. He explained that even when a project has a change management system, it may only show the “tip of the iceberg” and identified 14 causes of the iceberg effect along with remedies. Facilities were kindly provided by SNC-Lavalin.

**New Mexico Section**

The New Mexico Section received the following letter from its scholarship winner:

To the New Mexico Section of AACE

I want to take this opportunity to say thank you for awarding me the Andy Padilla Top Cat Scholarship and to tell you what this award means to me. My name is Alexander Colburn and I am currently pursuing a master’s degree in engineering at ASU. The very generous award that you have given to me lessens the financial burden of school and allows me to focus more closely on my studies. I can’t express how much this award will help me and how grateful I am to be receiving it.

I feel honored to be chosen to receive the first Andy Padilla Memorial Top Cat Scholarship and hope to conduct myself in a manner that would have made Andy proud. I strive to be as hard working and successful as Andy and will remember his ethics and generosity as I begin my career in the engineering practice. As an intern, I have had the opportunity to do some cost estimating work and I look forward to continuing this type of work after I graduate. I am very grateful to have received support in memory of Andy and I feel empowered to continue striving to reach my goals and visions, which include graduating with my masters in hydrosystems engineering from ASU and finding a job after graduation that allows me to combine my interests in hydrologic and hydraulic engineering with my interest in project management and estimating.

Again, thank you all for recognizing and honoring me with this award and I hope that I can bring honor to Andy ”Top Cat” Padilla’s memory.

Sincerely,
Alexander Colburn

**Russia Section**

The Russia Section on Oct. 31, sponsored a conference in conjunction with PMSoft, PM University, Russia Section, Region 9, Rosatom, Plekhanov University, Tilos, Asta, OnTrack Engineering, Isetia, Nomitech, Deltek, Oracle, and Hexagon. The conference featured presentations about companies that have led TCM implementation in Russia. There were 225 attendees.

Presentations were by
- Rosatom TCMNC Development – System which has 41 nuclear projects (7 in Russia 34 International) in Asia, Africa, South America, and Europe. Russian norms and standards were not working with foreign construction. The company looked at a variety of options and determined that AACE’s Total Cost Management was the best fit needed for their model. TCM was used to develop TCMNC.
- Plekhanov University, a leading economic university in Rus
in that the plant was built in area with no oil, resulting in a loss of safety and technical implementation was down. The presentation discussed how the company turned this around.

• **Southern California Section**

  On Oct. 25, the Southern California Section, in conjunction the American Society of Professional Estimators (ASPE) Los Angeles Chapter, had Mark Hovatter, Chief Facilities Executive of the Los Angeles Unified School District (LAUSD), discuss: 'Is It Possible for Owners to Get a Good Estimate in Today’s Bidding Environment.' Why is it so important to have a reliable estimate? What market factors impact a bid received? What company factors impact a bid? What owners factors impact a bid? Mark served in the US Navy in various construction-related posts for 23 years and during his enlistment he was awarded the Meritorious Service Medal and his base received two consecutive annual Commander in Chief’s Installation Excellence...
Awards from the President of the US. Mark Hovatter is responsible for managing the $28 billion LSUSD construction and modernization program. The Section had 22 members and guests attend this evening presentation.

On Sept. 26 the Southern California Section presented: Implementing 5D Modeling Technique for Capital Programs and Projects. The speaker, Sean Von Feldt, has engineered, implemented and maintained CPM schedules on several mega projects, including an airport, power plants, highways/toll-roads, nuclear material processing plants, tele-communication networks and transit railway infrastructures, all using Earned Value Methodology, Critical Path Methodology and Primavera systems as his primary controls tools. Sean discussed the foundation for a “5D-model” for any capital program or project, by creating a ‘systems and assets’ based WBS. In addition to AACE members there were 6 students who attended as the Southern California Section continues to reach out to the surrounding colleges and universities.

Shown above Southern California Section President Phil Peterson presents Sean Von Feldt, with a speaker’s gift at the September Southern California Section meeting.

Shown above attendees at the Southern California Section September technical meeting listen to guest speaker Sean Von Feldt as he presents: Implementing 5D Modeling Technique for Capital Programs and Projects.
When Will Your Section News Submission Be Published?
The digital Source magazine includes all “Section News” submissions. Source has a submission deadline of two months in advance of the issue date. Please review the following production schedule. It lists the submission periods for the six bi-monthly issues of Source magazine in 2017.

2017-2018 Source Section News Submission Schedule

February 2017
• Items submitted from Oct. 16 - Dec. 15, 2016

April 2017
• Items submitted from Dec. 16 - Feb. 15, 2017

June 2017
• Items submitted from Feb. 16 - April 15, 2017

August 2017
• Items submitted April 16 - June 15, 2017

October 2017
• Items submitted June 16 - Aug. 15, 2017

December 2017
• Items submitted Aug. 16 - Oct. 15, 2017

February 2018
• Items submitted from Oct. 16 - Dec. 15, 2017

April 2018
• Items submitted from Dec. 16 - Feb. 15, 2018

June 2018
• Items submitted from Feb. 17 - April 15, 2018

This production schedule is based upon production schedules at AACE headquarters, as well as our printer having two to three weeks production time to take our in-house files and convert them to the Nxtbook software for posting. Enhanced features like audio, video, website links, and more will be a part of each issue of the Source. Some technology features will require additional production time and earlier deadlines. The magazine is to be ready for posting by the first of the month.

Within 2 to 3 business days of submitting a “Section News” items, you should receive a return confirmation e-mail that your submission was received at AACE headquarters.

How to Submit Text and Photos
Please submit any and all text as a part of the e-mail or as a Microsoft Word file attachment. Please submit any photo or photos as individual attachments in tiff or jpg formats. Do not embed photos in Microsoft Word files.

For photos to be used, we require either large original files or print size photos at 300 dpi (dots per inch). We can convert large 72 dpi submissions into the required 300 dpi. This process shrinks the size of the original submission. We cannot use photos taken on cell phones. For photos to be published, they must be in focus, of print quality, and wide enough to fill the width of the column layout.

Please include the names and titles of each person shown in any photos. Please list names from left to right or refer to those shown as being above left or right. For group photos please list names from left to right, beginning with the front row and working to the back. Do not list the Section officer first unless he or she is photographed on the left with guest speakers on the right.

All submissions should be e-mailed to editor@aacei.org. Please use the official name of the Section as approved by the AACE Board when the Section’s charter was approved. Never refer to the Section as a chapter.

Contact AACE Concerning Missing Submissions
Generally, all submissions received in the above scheduled times will be published in the listed issue. Items are not held because of space restrictions. There is no waiting list and no preference is given to one Section over another. Questions about incomplete submissions or failure to follow these submission guidelines could delay publication. Text will be published without submitted photos if the photo does not meet the listed quality requirements.

If a submission is not included in the designated issue, please e-mail or call the Managing Editor to ensure that it has not been lost or misplaced. Call or e-mail if you do not receive a confirmation e-mail within 3 business days of submission.

AACE reserves the right to edit all submissions and/or to refuse to publish any submissions determined by the Managing Editor or the Art Director to not meet the standards of the journal. Any appeals of these decisions will have a final decision determined by the Executive Director.

Any Section representative with questions is advised to e-mail editor@aacei.org or call the Managing Editor during regular business hours (9 a.m. to 5 p.m. Eastern Standard Time, Monday-Friday, except holidays and special closings.)
I Am AACE

We received many creative and inspiring video submissions about why our members value AACE International and how they are AACE! We are pleased to announce the winners of the contest!

Special thanks to all who submitted a video for consideration. The winner of our first place prize and free registration for the 2018 Annual Meeting in San Diego and hotel stay is Lucia Vernon!

You can watch Lucia’s video and all our winners on our website, web.aacei.org.

Lucia Vernon
Associate Director at QGS

“I want to tell all young people that success is achievable. It is waiting for you somewhere within the AACE community. So be part of it; use it to help your dreams come true.”

Abhijnan Datta
Project Controls Manager at Sydney Motorway Corporation

“They have always been the guiding star for my career. It is very hard for me to think of my career strategically without thinking of AACE. They are inherently joined at the hip.”

Shohreh Ghorbani
Director at Project Academy

“AACE has become my number one source for finding content and improving my skills and knowledge in project controls.”

Sandra Milena
Cost Analyst at Cenovus Energy

“The Annual Meeting is the event. I want you to come. You will find wonderful experts and technical meetings; we are going to learn a lot and have fun. See you there!”

See what the buzz is about!

Join AACE International in San Diego, California
June 24-27th at the Manchester Grand Hyatt
#2018AACE

Find more information at web.aacei.org
THE TOP 10 REASONS TO JOIN AACE INTERNATIONAL

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Locate thousands of technical papers and publications in the Virtual Library. AACE's database is keyword searchable for quickly locating appropriate reference articles.

CAREER
Members can post resumes at no additional cost in our Career Center and keep your career on track through information sources such as our annual Salary and Demographic Survey of Project and Cost Professionals.

LEARNING
We offer numerous online learning courses on estimating and project management. The Approved Educational Provider program helps maintain high quality development courses and providers. AACE also holds many seminars throughout the year.

RESOURCES
Starting with the TCM Framework and Recommended Practices that are available for free only to members to our bi-monthly publication Cost Engineering featuring articles for cost professionals around the world. Through the AACE International website, the Cost Engineering journal is a great current resource for members and as a member, you gain access to an archive of past issues.

TECHNICAL DEVELOPMENT
Increase your knowledge and expertise by joining one of AACE International's many technical subcommittees, subcommittees, and Special Interest Groups (SIG's) at no additional cost to members. Discuss industry problems with your peers or help experts develop new and improved techniques and practices for the profession.

NETWORKING
By attending a local section or our Annual Meeting for interesting speakers, informational tours, social dinners and much more. The online Membership Directory is an excellent source for a list of contact information on thousands of members. Join one of our many technical subcommittees and participate in the AACE Forums - a great way to tap into the collective wisdom and experience of our world-wide membership.

EXCELLENCE
Our certification programs are independently accredited by the Council of Engineering & Scientific Specialty Boards. AACE certifications are a recognized credible standard in the cost management field. A recent study shows that individuals with an AACE Certification earn 17.4% more than their counterpart without a certificate.

DISCOUNTS
On products and services ranging from Annual Meeting registration fees, archived webinars and presentations, certification examination registrations, and more!

YOU!
We are your professional partner bringing you information and support you can trust. Join and become part of a unique network of individuals who are dedicated to improving the cost and management profession.
**COMING EVENTS**

**DECEMBER 2017**

5  Structural Engineers of Illinois (SEAOI) Dinner Meeting: Theory and Application of Turned Mass Dampers, Structural Engineers Association of Illinois (SEAOI), Cliff Dwellers Club, Chicago, IL  
Contact: www.seaoi.org

7  Structural Engineers of Illinois (SEAOI) Seminar - Fall Prevention: Protecting Those Who Preserve Chicago’s Skyline, Structural Engineers Association of Illinois (SEAOI), Association Forum, Chicago, IL  
Contact: www.seaoi.org

**JANUARY 2018**

23  The 2nd Annual Young Engineers Symposium, Structural Engineers Association of Illinois (SEAOI), Chicago, IL  
Contact: www.seaoi.org

**FEBRUARY 2018**

6-8  2018 International Roofing Expo  
New Orleans, LA  
Contact: www.theroofingexpo.com

15  SEAOI Seminar: Anchorage to Concrete, Structural Engineers Association of Illinois (SEAOI), University Center Chicago, IL  
Contact: www.seaoi.org

**MARCH 2018**

4-6  SPS Industrial Automation Fair, Guangzhou, China  
Contact: www.spsinchina.com

**APRIL 2018**

26  The 15th Annual SEAOI Midwest Bridge Symposium, Structural Engineers Association of Illinois (SEAOI), Maggiano’s Little Italy, Chicago, IL  
Contact: www.seaoi.org

**MAY 2018**

18  Ethics for Engineers, Structural Engineers Association of Illinois (SEAOI), Association Forum, Chicago, IL  
Contact: www.seaoi.org

**JUNE 2018**

11-14  AACE International’s 2018 Annual Meeting, AACE International Manchester Grand Hyatt, San Diego, CA  
Contact: phone 1-800-858-COST fax (304) 291-5728 info@aacei.org web.aacei.org

Please submit items for future calendar listings at least 60 days in advance of desired publication.

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