Greetings Young Professionals all around the World

FIDIC YPF Steering Committee had a busy couple of months. During October 2014, SC members got roles in various sub-committees including the Social Media and E-Newsletter, the YPF database and email, management of our Website, YPMTP Support, developing YP Groups in Latin America, YPF reference guideline, GAMA and ASPAC YPF, and YP Awards. Additional to this, YPFSC is working hard on the YP program for the FIDIC Conference in Dubai, UAE this September. We will have the normal fun activities such as the “YP Meet and Greet”, “Breakfast with the FIDIC Executive Committee”, “an interesting site visit” and “social afterwards”. I shall say thank you to all companies who support and sponsor some achievement of YP activities like “YPF Reference Document”, “Meet & greet event”, and the “Technical tour”. Furthermore a special thanks to FIDIC for making a discount for FIDIC YPF members to register for Dubai 2015. Join us in Dubai FIDIC Annual Conference from September 13-15, 2015, use the available discount and enjoy the YP programs!

It is my honour to report that GAMA and ASPAC YPFSCs had a great job on holding FIDIC Annual Regional Conferences in Ghana and Tehran, Iran. Well done friends!

And finally, I am so pleased to announce that YPFSC is seeking to establish an Annual YP Awards to further support, promote and acknowledge the efforts of Young Professionals in our industry. The Award will highlight the remarkable achievements of Young Professionals across the world and encourage further participation of YPs within FIDIC. Thanks to Takashi Matsuo (Japan), the Business plan for “YP Awards” was prepared and got approved by FIDIC Executive Committee. We are working to start the first announcement for YP Awards 2016 in Dubai 2015.

Enjoy the Newsletter.

Manoochehr Azizi
FIDIC YPFSC Chairman
THE NEW VISION OF THE CONSULTING ENGINEERING FIRMS WITH THE HELP OF INNOVATION

Most of us can agree that consulting engineering firms (CEF) can no longer afford to limit their scope to only consultancy services, as most projects these days are multi-disciplinary and have to be supported by innovative thinking. (Aliyu A. Aziz, 2000). Clearly, enabling technologies in the third millennium will liberate users and owners to use information personally and directly. That is to make available to these individuals information to support rational decision-making and to have the courage of developing their ideas. The role of "Innovation" in Service Industries has still not been sufficiently researched or thoroughly developed.

Consulting engineering firms can provide a specific type of service as they are project-based organized and providers of knowledge-intensive business services. As such, their position within the innovation system as the organization of innovation is context specific. Where innovation for the CEFs used to be client driven, this will be increasingly at the initiative of the CEFs to create their market (Arjen van Bruchem, 2011). The networked position requires other competences of the engineers and their managers.

The ability to innovate is considered one key success factor of business survival and performance (Porter, 1991). In addition, radical innovations were found to have positive effects on a firm’s brand, image and reputation (Pauwels, Silvarisso & Srinivasan, 2004). CEFs see themselves more and more positioned in a networked world where traditional engineering is being commoditized and other ways of innovation and business models have to be found. This changed position requires other competences of the engineers and their managers. Above all, CEFs need among ourselves trust, loyalty, and strong relationships to really stimulate diversity and innovation in this millennium.
To prepare and maintain our competitiveness in global markets and to tackle the important challenges of today, a dynamic and pertinent innovation strategy is not an option, it is a must; otherwise we will not be the first who are doing it. The consulting industry will play a valuable role, together with the other partners. A large proportion of barriers to innovation and corresponding threats are in common. Developing specific priority common actions makes sense. (Michel Ray, 2013). Concrete actions need to be taken at a national or international level; some well-targeted actions need to be developed at a world level. It may take time but it seems to be the responsibility of our industry.

As Peter Drucker said: “Innovation is the specific instrument of entrepreneurship. The act that endows resources with a new capacity to create wealth.”
PROJECT MANAGEMENT AND TOTAL QUALITY MANAGEMENT

Project management has become a main factor in achieving project success due to new project requirements, including new high quality standards, fast track projects (which have to be executed within a limited time), resource diversity, and huge project sizes which require effective project management throughout the project.

These requirements create the need for new project management skills and qualifications to guarantee the smooth delivery of any project.

It is difficult to mention all of the required project management skills since they are dependent on many social and economic factors in addition to the project characteristics, such as size and type.

The following paragraphs discuss a few points about how to improve the quality of project management. This is followed by a few methods which are available to implement TQM.

Total Quality Management (TQM) in Project Management (PM)

When we search for the quality of project management and the related skills, we should talk about TQM which is a ‘management philosophy that seeks to integrate all organizational functions (marketing, finance, design, engineering, and production, customer service, etc.) to focus on meeting customer needs and organizational objectives’ (Hashmi, 2010).

Through its definition, TQM is a tool which connects all activities of a business, regardless the type of business, in order to reach the required level of quality. ‘Project Quality Management applies to all projects, regardless of the nature of their product’ (The Project Management Institute, Inc., 2008:189). This quality is not only related to the product itself, but it extends to cover all work stages from the first step of marketing to the last stage which is the delivery, or handing over a project.
Referring to Nayab (2010), TQM ‘addresses key problem areas such as mistakes in work processes, redundant processes, unnecessary tasks, and duplicate efforts’. TQM controls the whole process to guarantee the smooth flow of work progress, saving time and money and thus achieving the project goal, within the well-known triangle ‘Time, Cost and Quality’.

As a part of the work process, obtaining management satisfaction is necessary before starting and through the progress of any process. This satisfaction is through making a real work plan, future expectations, work requirements, work progress and the expected benefits which the customer is looking for. All these factors and requirements can be guaranteed through a clear system of TQM which will manage and organize the required process of approvals and the communication system between the top management and the production progress.

On the other hand, getting ‘Customer Satisfaction’ (Nayab, 2010) is also related to TQM, which is necessary to keep work progress within the scope without incurring unnecessary costs, time delays or quality deviation due to the first two factors. Customer satisfaction is dependent on their needs, which is usually the delivery of a quality product on time.

It is important to keep company staff updated regarding all available resources and technologies which may support the work process and update the available resources through ‘Continuous Improvement’ (Kurtus, 2001), which is another principle of TQM. With continuous improvement of work processes, the company is expected to benefit from the provision of quality product or services, as well as achieving customers’ satisfaction. This continuous improvement is evident with an effective Quality Management System in place. Wysocki (2009:10) mentioned that Quality Management ‘helps organizations to use their resources more effectively and efficiently’.
To achieve Continuous Improvement, we have to get ‘Management Commitment’ (Hashmi, 2010) which is a main factor for the success of any plan. Management should approve any plan before implementation; therefore it is very important to prepare a clear plan and requirements before being committed to any project. Management commitment is the guarantee to keep the project in motion, to get the required resources and requirements, and to get management support for any raised issue.

Another objective that can be achieved through implementing TQM is ‘Organizational Development’ (Nayab, 2010). Here, TQM represents the tool that educates the available resources on how to do the required job in an approved way or method, guaranteeing the required quality of a product or project. Also, TQM builds a communication plan between all the parties in order to get the job done with the collaboration of everyone through a quality plan specifying the duty of each one and the work process between the different parties.

**Methods of TQM**

There are a lot of methods to implement TQM; some of them are easily applied using charts or diagrams to clarify the idea. For example, an Organization Chart can be prepared that represents the hierarchy process inside a company. Those charts or diagrams can be prepared by using simple software, such as MS Excel.

For more official and professional TQM, Kurtus (2001) mentions a few quality methods such as ‘just-in-time production, variability reduction, and poka-yoke that can improve processes and reduce waste’.

Another famous and professional tool for TQM is Six Sigma, which is well-known for its quality processes. There are a lot of steps through it, and many certifications and levels can be obtained in order to go deeper into the quality management processes.

BSI offers several international quality standards which vary in accordance with the type of work or company. ISO 9001 is the quality management standard, which was updated by BSI to support Quality Management Systems.
Conclusion

TQM is a tool to update and guarantee the quality of a product or a project. It helps to understand the quality requirements, standards and processes in order to start work in a proper way to get the required quality and to satisfy both the management and the customer. ‘A sound quality management program with processes in place that monitor the work in a project is a good investment’ (Wysocki, 2009).

TQM is not a solid documented system, but it runs during the project to enable available staff to understand the quality requirements (including quality, safety, cost, time, etc…).

Project Managers should be involved with the procedures of TQM, and should be able to update skills and background to understand the new quality procedures in order to be able to control and manage projects and staff.

As a final result, ‘Total quality management is an ever-improving system for integrating various organizational elements' (Kerzner, 2009:875).

References

CREATING A SUSTAINABLE WORLD: THE ROLE OF THE CONSULTING ENGINEER

Most engineering achievements of the past were developed without consideration for their social, economic, and environmental impacts on natural systems. Engineering practice has been based on a paradigm of controlling nature rather than cooperating with nature. (Amadei, 2004) Not much attention was paid to minimizing the risk and scale of unplanned or undesirable perturbations in natural systems associated with engineering systems.

Considering the problems facing our planet today and the problems expected to arise in the first half of the twenty-first century, the engineering profession must revisit its mindset and adopt a new mission statement – To improve the quality of life. This means contributing to the building of a more sustainable, stable, and equitable world. Engineers have a collective responsibility to improve the lives of people around the world.

Maurice Strong, Secretary General of the 1992 United Nations Conference on Environment and Development, asserts that, “Sustainable development will be impossible without the full input of the engineering profession” (qtd. in Amadei, 2004). For that to occur, engineers must adopt a completely different attitude toward natural and cultural systems, and reconsider interactions between engineering disciplines and non-technical fields (Amadei, 2004). Creating a sustainable world that provides a safe, secure, healthy, productive, and sustainable life for all peoples should be a priority for the engineering profession. Engineers have an obligation to meet the basic needs of all humans for water, sanitation, food, health, and energy, as well as to protect cultural and natural diversity. Improving the lives of the five billion people whose main concern is staying alive each day is no longer an option; it is an obligation. Engineers are responsible for addressing the complex problems associated with refugees, displaced populations, and the large-scale movement of populations worldwide resulting from political conflicts, famine, shortages of land, and natural hazards.
The consulting engineer must see himself as a driver of innovation, social and economic development. He must effectively innovate and apply engineering and technology to global issues and challenges such as poverty reduction and climate change and urgently develop greener engineering and lower carbon technology.

The Engineer must give back to society by assisting in transforming engineering education, curricula and teaching methods to emphasize relevance and a problem-solving approach to engineering. Educating engineers to become facilitators of sustainable development, appropriate technology, and social and economic changes represents one of the greatest challenges faced by the engineering profession today. Meeting that challenge may provide a unique opportunity for renewing the leadership of the engineering profession as we enter the twenty-first century.

We have to learn to broaden our design brief beyond the traditional objectives of schedule, cost and conventional scope. We have to learn to include broader societal necessities such as minimizing water, energy and materials use, respecting human and cultural rights, and looking out for health and safety, not only within the work but also in its impacts. (John Boyd, 8). This is a challenge that needs true engineering innovation. It is a challenge as well as our opportunity to restore and further enhance the image of the engineering profession.

Clearly, engineers must complement their technical and analytical capabilities with a broad understanding of so-called "soft" issues that are nontechnical. Social, environmental, economic, cultural, and ethical aspects of a project are as important as the technical aspects.

Today, engineers are obligated to make intelligent decisions that protect and enhance the quality of life on Earth rather than endangering it.

Reference

THE IMPORTANCE OF BUILDING A PERSONAL BRAND

As Consulting Engineers, we are quick to learn the importance of developing and promoting our employer’s corporate brand. We understand that developing a well-known and respected corporate brand is fundamental to securing new and continuous work. However, we often overlook the need to develop our own personal brand.

There are many ways to define a personal brand. In her article *The New 10-Step Executive Personal Branding Worksheet*, Meg Guiseppi wrote:

> “Your brand is your reputation – the perception of you held by the external world. It is the combination of personal attributes, values, drivers, strengths, and passions you draw from that differentiates your unique promise of value from your peers, and helps those assessing you to determine if they should hire you or do business with you.”

There are numerous benefits to developing a strong personal brand, both for yourself and your employer. I think Barry Feldman summarized it nicely by identifying these eight key benefits:

1. A steady stream of ideal clients
2. Rewarding partnerships
3. Leadership opportunities
4. Greater mindshare
5. Association with a market niche
6. Greater credibility
7. Recognition and prestige
8. Higher perceived value

With the benefits of a personal brand clearly evident, how does one go about developing one? Whether we are cognisant of it or not, everything we do establishes our personal brand; from the way we communicate with others, to the quality and efficiency of our work.
There are numerous ways to actively develop and promote your personal brand. Although too many to cover in this article, there is plenty of excellent guidance available online and in books. A good start is to identify your strengths and what separates you from others. Your personal brand should be consistent with your career objectives and values to ensure you are working towards a happy and fulfilling career.

Your professionalism while on the job is obviously a major component of your brand. However, additional effort is required if you want to stand out from your peers. This may include volunteering with industry associations, guest lecturing at schools or conferences, or getting involved with other organizations or charities that are relevant to your line of work. Through these activities you can help develop a network of professional contacts and establish yourself as a leader in your field. Establishing an online presence, including the use of various social media outlets, can also establish you as a thought leader and increase your exposure to potential clients and employers.

Developing a strong personal brand takes time and effort, but leads to a successful and fulfilling career. Younger professionals may feel they are not established enough to start promoting their brand. However, there is no better time to start than early in your career.
The 2015 FIDIC-GAMA Conference hosted by the Ghana Consulting Engineers Association (GCEA), was held in Accra, from the 12th to 15th April, 2015, with the theme, “Developing and Sustaining Africa’s Infrastructure: Promoting African Consulting Engineering Partnerships”.

In attendance were 41 Young Professionals from nine (9) African Countries - Nigeria, Botswana, Ghana, Kenya, Tanzania, Zambia, Mozambique, Morocco, South Africa, and one from India.

**Day 1-Sunday, April 12, 2015**

YP Meet and Greet-This event took place in the afternoon, before the welcome reception. The GAMA YPFSC (Chair) welcomed YP participants and urged all the YPs to be actively involved in the activities of the YPF. He solicited the support of FIDIC-GAMA Executive Committees, to help realize the vision of the YPF. He also thanked FIDIC Executive Committee for helping to establish GAMA YPF and the support received so far from GAMA Executive Committee.

The Local Organizing Committee (LOC) Chair, Ing. Albert Ayeh Ogyiri, addressed the Young Professionals on the theme, “The Relevance of GAMA YPF in the Consulting Engineering Industry.” He likened Engineering as a game of football, where everybody seems to have an idea on what needs to be done, thus putting the practice of Engineering under lots of pressure. He added that YPs are relevant in the consulting engineering industry due to the limitations on the part of the Senior Professionals.

The Managing Director of FIDIC, Mr. Enrico Vink, also addressed the YPs on the theme, “The Expectation of FIDIC from Young Professionals”. He reminded all YPs about the overall essence of the profession, that is, to improve on the quality of life. He therefore advised YPs among other things, to standout and offer a hand of support or professional expertise.
A member of the GAMA YPF Steering Committee, Jeshika Ramchund, gave a presentation on the history and achievement of GAMA YPF.

The in-coming chair, Francis Kofi Yankey, gave a presentation on how to form Member Associations (MAs) YPF, using the FIDIC Reference Book.

The outgoing chair, Adedoyin Obikanye, gave a closing speech, thanking all YPs for availing themselves for the YP Meet and Greet session and wished them all the best in the coming sessions and events.

The session ended with refreshment as YPs had the opportunity to network among themselves. Present at the event was the GAMA Chair, Eng. George Sitali.

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**GAMA Executive Committee (Exco) Meeting**

The incoming Chair and the Out-going Chair of GAMA YPF attended the GAMA Exco meeting. The GAMA Chair, Ing. George Sitali, commended the YPFSC for a well-organized and attended YP Meet and Greet event. He also thanked the YPFSC for their initiative in holding their meetings on-line and urged the Exco to emulate that example.

He further informed the YPFSC that hence-forth, a member of the GAMA Exco would be nominated to attend the monthly skype meetings of YPFSC. The meeting further informed the YPFSC that YPs will be made to sit on each of the eight working committees of GAMA, the Chair of GAMA YPFSC will be sponsored to FIDIC-GAMA Conferences.
Day 2- Monday, April 13, 2015

The opening ceremony was chaired by Eng. George Sitali, the GAMA Chair.

The Chair informed the delegates that the conference was being organized while the African continent was battling and still is, with a humanitarian crisis – EBOLA. He therefore urged all to come together to help combat this great tragedy. The Chair also torched on the theme for the conference and emphasized the need for the development of infrastructure while working together to achieve this sustainably.

Other Speakers includes the FIDIC President, Pablo Bueno, the LOC Chair, Ing. A. A. Ogyiri, the Mayor of Accra, Dr. Alfred Ako Vanderpuije and the Minister of State in charge of Public Private Partnerships at the Presidency, Honorable Rashid Pelpuo.

Plenary Sessions

Three plenary sessions were held on Monday 13th April, with YP’s in attendance.

- Plenary 1 gave an overview of the Status of Africa’s Infrastructure and its Environmental, Social and Economic Impacts.
- Plenary 2 dealt with Africa’s Infrastructure and its Environmental, Social and Economic Impacts with special focus on Water and Power Supply and Road infrastructures. There were talks on Africa’s ICT infrastructure, The Engineering Practice in Africa and the Benefits of Evaluating, Measuring and Reporting on Infrastructure Development Impact Outcomes.
- Plenary 3 gave a special focus on the Young Professionals View on Africa’s Infrastructure. Five YPs gave presentations on this theme. The out-going GAMA YPFSC Chair, Adedoyin Obikanye, Amine Amar, Jeshika Ramchund, Mayowa Dalero and Jane Naki Tetteh-Anowie, gave unique presentations in this session.

Adedoyin Obikanye and Amine Amar, did a joint presentation on the theme, “The Promotion of Intra-Regional Partnerships to Foster Stronger Influences and Advocacy of the Engineering Profession amongst Governments and Nations. Jeshika Ramchund gave a presentation of the theme, “Building Capacity through Guidelines for Mentorship and Graduate Development Programmes.”

Steering Committee Members from Left, Jeshika, Francis, Doyin and Austin

Some YPs with the GAMA Chair, Eng. George Sitali (second from left)

The day was climax with the Local Colour Night. YPs were served with delicious Ghanaian dishes and thrilled with live band music interspace with Ghanaian cultural displays and folktales.

**Day 3-Tuesday, April 14, 2015**

**Plenary Sessions, YP Technical Tour, YPs on GAMA Working Committees and Gala Dinner**

The day continued with the plenary sessions. Plenary 4 addressed the theme, “Developing the Intra-Regional Partnerships Amongst Indigenous African Consulting Firms and Plenary 5 addressed the theme, “Strategic Funding of Infrastructure to Accelerate Growth of Consulting engineering. Nine speakers made presentations on the themes.

In the afternoon, eight YPs representing the eight working committees of GAMA and selected by GAMA YPFSC, attended the working committees meeting. The eight YPs are, Moyo Sean Sethule, Bostwana, Ally Kanyonda, Tanzania, Kennedy Mwangi Kiunga, Kenya, Benedicta Acherekoh, Ghana, Jeshika Ramchund, South Africa, Abednego Gogo, Ghana, Austin Wvaali, Zambia and Keamogetswe Mmekwa, South Africa.
The YP technical tour organized by YPFSC, commenced late afternoon. YPs visited an on-going interchange project site located at the Kwame Nkrumah Circle, the center of the city, Accra.

YPs had the opportunity to communicate directly with the Resident Engineer and got to know firsthand, the importance of the project to the social-economic development of the country, the project cost, time of completion and other engineering related questions. The role of consulting firms in helping to improve on the project performance and the quality of life was also highlighted by the Resident Engineer. The tour was climax with a refreshment organized by YPFSC.

![YPs with the Resident Engineer (wearing helmet) after the Site Visit](image)

The day ended with the Gala and Awards Night. Practicing and Retired Professionals in Consulting Engineering firms who have helped build the image and the practice of consulting engineering were honored.

**Day 4-Wednesday, April 15, 2015**

The GAMA workshop was held with special focus on the Oil and Gas Industry in Africa.

Two plenary sessions on the promotion of the effectiveness of partnerships in the Oil and Gas industry through capacity building were held. Six speakers gave presentations on the theme with focus on capacity building and effective partnership.
TEAM BUILDING

Team building is the process of helping a group of individuals, bound by a common purpose, to work with each other, the leader, external stakeholders, and the organization. The result of good leadership and good team building is teamwork. (PMBOK 5th edition).

Team building generally sits within the theory and practice of organizational development, but can also be applied to sports teams, school groups, armies, flight crews and other contexts. There have been many issues in past literature about the conceptual definition of team building. However, now there is consensus and conceptual clarity about what team building constitutes exactly. Its four components are:

- Goal setting: aligning around goals
- Interpersonal-relationship management: building effective working relationships
- Role clarification: reducing team members’ role ambiguity
- Problem solving: finding solutions to team problems

Developing a team environment involves handling project team problems and discussing these as team issues without placing blame on individuals. Team building can be further enhanced by obtaining top management support; encouraging team member commitment; introducing appropriate rewards, recognition, and ethics; creating a team identity; managing conflicts effectively; promoting trust and open communication among team members; and providing leadership.

While team building is essential during the front end of a project, it is an ongoing process. Changes in a project environment are inevitable. To manage these changes effectively, a continued or renewed team-building effort is required. Outcomes of team building include mutual trust, high quality of information exchange, better decision making, and effective project management.

These team-development interventions have proven to have positive effects on cognitive, affective, process and performance team outcomes. Team building has seen the strongest effect on affective and process outcomes. According to Klein et al. (2009), team building is one of the most widely used group development interventions in organizations today.
HOW TO BECOME PART OF THE FIDIC YPF GROUP

Become part of this young dynamic group of people and receive updates, newsletters and information on upcoming events such as FIDIC conferences and training opportunities.

International YPF Groups: find out what the YPs in your country are doing and how to connect with them! Please register on the YPF homepage listed below.

Once we have your details, we will send you our newsletter and other info as it comes up.

Please remember to keep your details updated!

For general information please visit the FIDIC website at www.fidic.org or the FIDIC YPF page http://fidic.org/ypf

For more information or personal assistance on how to connect please contact us at fidicypforum@gmail.com, Jomanah AlBtoush, Communications Chairperson, FIDIC YPF Steering Committee

STARTING YOUR OWN YPF IN YOUR COUNTRY

If you liked what you saw in the FIDIC YPF and YPFs across the world, why not start your own local group and join the international Forum? This is best achieved through the FIDIC Member Association (MA) in the country you are based. However, if no such association exists, or your MA can’t support the creation of a national YPF, you can contact us to assist you. FIDIC can also provide support and resources to assist you in creating an YPF group in your country. All you need is your enthusiasm for Engineering! From there you decide what it is that you want your YPF to represent. What is your focus? Is it just socializing with your peers? Or is it all of the above? As the FIDIC YPF, we will do all we can to support your new endeavor!

Contact us at fidicypforum@gmail.com!

CALL FOR ARTICLES AND NEWS FOR PUBLISHING IN YPF NEWSLETTER

If you would like to publish any articles or post any news and activities of your YP group in the YPF Newsletter, please contact us by email at jomanah_albtoush@aj-group.com