

career tracks our athletes can run on? Do we properly define what it takes to be successful in our industry? This dilemma, I believe, has more to do with perception of accomplishment and perception of what it takes to reach the pinnacle of validation of our career choices. As the industry adjusts to these realities, we need to be prepared as young professionals. This entails, in short, carving our own path; and yes, seeking first place. While running the marathon, though, the question that will demand an answer is what "first place" is really meant to be for one's career.

Carving TWA's Own Path

You have spoken and we have listened. In staying true to *TWA's* mission, we have incorporated into the magazine the feedback we obtained through our *TWA* readership surveys, letters to the editors, focus groups, SPE staff, and all of the SPE members and friends who have approached us. One of the most evident changes is that we have refreshed our layout and design with new colors and artwork. We have enhanced the scope, content, and purpose of our most popular sections and redefined others. We have brought new sections to our content lineup and included many surprises. In this issue, you will enjoy for the first time *AYP's Guide to...* (a section that caters to our highly mobile careers and presents the opportunity of getting to know typical oil and gas work locations across the planet), *Tech 101 Series* (responding to our readers' craving for technical content and interest on the latest technology), *Women on the Frontline* (following the well-received publication of our past issue dedicated to women in our industry), *Your Best Shot* (an occasion to enjoy the wonders of the locations YPs get to see while on location), and *YP Newsflash* (a chance to learn about our fellow YPs around the globe—David and Roberto's mission, in particular, will certainly uplift your spirits in the pages ahead).

Now you can't stop. Visit and enjoy all our sections and find out why we are very excited about our new plans for our magazine. And, of course, tell us what you think. If you have any comments, questions, or suggestions, contact us by email at EditorTWA@spemail.org. You can also contact me directly by email at ayala@psu.edu. We would be happy to hear from you. Please also let us know if you would like to be published in our Letters to the Editor section and let your voice be heard. **TWA**

Helge Lund Chief Executive Officer StatoilHydro



Trond Isaksen/StatoilHydro

Helge Lund is chief executive officer (CEO) of StatoilHydro. He was appointed to that position in 2004, having previously served as CEO of Aker Kvaerner. From 1999–2004, Lund held central managerial positions in the Aker RGI system, among them the posts of deputy president, chief operating officer, and deputy chairman of Aker Maritime. He also has been a political adviser to the Conservative Party of Norway's parliamentary group, a consultant with McKinsey & Company, and deputy managing director of Nycomed Pharma. Lund earned an MA degree in business economics from the Norwegian School of Economics and Business Administration, Bergen, and an MBA degree from the Institut Européen d'Administration des Affaires, Fontainebleau, France.

What was your first job, and what were your impressions of the oil and gas industry when you began working in it?

My first jobs were not in the oil and gas industry, but in politics and business consulting. After graduating as an economist from the Norwegian School of Economics and Business Administration, I worked as a political adviser to the Conservative party's parliamentary group and as a consultant with McKinsey & Company, before joining pharmaceutical manufacturer Hafslund Nycomed in 1993.

I joined Aker RGI Holding, Norway's largest private company, in 1999 and then became chief executive of Aker Kvaerner, the global engineering and construction services provider, in 2002. Aker and Aker

Kvaerner acquainted me with the oil and gas industry from a supplier's standpoint, so I had a good general understanding of the business when I was appointed president and chief executive officer of Statoil, now StatoilHydro, in 2004.

The oil and gas business is an exciting industry to work in, with extraordinary, interesting professional challenges—technologically, industrially, environmentally, and politically. The energy sector stands at the intersection of two of the most pressing challenges facing the world today: securing energy supplies for a growing world population and curbing greenhouse gas emissions as energy supplies are developed and produced. We need the best brains

available to meet the challenges ahead.

Is there anything you would have changed about your career path?

I have had no deliberate career plan, but have been fortunate enough to be presented with a number of exciting professional challenges. It has also been rewarding to work with such challenges in different industries.

What lessons can you share about leadership? How can a young professional (YP) achieve and maintain a successful career?

We have clear expectations for our leaders in StatoilHydro. If you accept leadership responsibility, we will recognize and reward your performance, based equally on what you deliver and how you behave in relation to our values and leadership principles. You have to work hard along both dimensions to achieve results. The ability to collaborate effectively across geographic boundaries, business areas, and professional disciplines will be increasingly important as our industry becomes more and more complex.

How would you describe your leadership style? Is there any specific management book you would recommend?

I like to be close to my team and the business, and to engage in operational and strategic problem solving. Creating an atmosphere of trust and openness is a critical aspect of leadership, particularly in big organizations.

I would not like to identify one particular book. I try to learn from my own mistakes and tap into other people's practical leadership experiences.

What do you believe are the top three challenges facing a young engineer today?

I do think we need to focus on the three most important factors shaping our industry. First, population growth and higher standards of living are increasing the demand for energy. Second, our industry is getting more complex. We have to overcome more difficult challenges, such as deeper waters, Arctic environments, and unconventional resources. Finally, we have to produce new forms of energy that contribute to the reduction of carbon emissions. Individually and collectively, these three factors represent huge challenges for the new generation of engineers.

Do you recommend continued

education, such as an MBA, for those who have completed undergraduate engineering degrees?

To deliver on the industry's challenges, we need highly qualified people with different perspectives. Even in times when we have had a race for talented people, we recommend that students should complete their degrees. For the most attractive positions, applicants with international experience who deliver consistently above expectations and show the right attitude and behavior will have an edge.

Who is your favorite historical figure and why?

Nelson Mandela because his leadership and moral authority were vital in transforming South Africa.

In coping with the present economic downturn, cost cutting is spreading through all industries. How are you approaching this issue?

When market conditions change, players need to reboot to adjust to new circumstances. The challenge is to find the right balance: reacting, but not overreacting. For us, this means that we are adjusting our speed but not our strategic direction. Our plans for 2009 are robust and flexible to capture the benefits of a changing industry environment and to position us for the longer term.

Personally, I will work with my team to use this situation as a catalyst for driving performance and operational improvement throughout StatoilHydro.

Are these cutbacks affecting training budgets?

Our primary people-development tool is the assignment of stretching tasks and on-the-job training. Our StatoilHydro School additionally supports the development of both leaders and professionals through dedicated solutions, such as graduate and induction programs, various discipline-based programs, a project academy, and leadership-development programs. We do not have any plans to cut back on these programs at this stage.

Many recent graduates and YPs are worried about their future in the oil and gas industry because of the economic downturn. What would you like to tell them?

In my opinion, the most important corporate resource over the next 20 years will be talent. Because of a lack of recruitment following the previous downturn in 1998–99, we also face a

generational challenge. Many people in our industry are close to retirement age. The oil and gas sector is a cyclical industry, and we are used to running our business in such an environment. The current financial crisis and its effects on the level of activity could influence the need for talented people in our industry in the short term. However, since major challenges must be overcome to meet the rising world demand for energy, I believe there will be opportunities for many YPs in the future. My company will continue to recruit graduates under the current circumstances.

What would be a good strategy for someone aiming to develop as a manager?

My advice would be to develop their skills by seeking continuous development and taking on stretch assignments. They should get an unsentimental and candid coach with a strong dedication for developing people.

Most YPs face a critical decision on whether to continue on a technical career path or to move into management. What is your view on this issue, and what underlying criteria should they apply to making that decision?

Our career model makes allowance for a shift between professional and leadership development. Employees have the opportunity to explore both and to develop their own talents and interests. We need people with both technical and leadership expertise, sometimes in combination. Both are equally important and valued.

Based on your experience, in the case of professionals on the technical ladder, how many years of technical training or grounding are recommended before taking on a managerial role?

That will always depend on the individual, the scope of the role, and the proven track record. People should get leadership challenges early and test themselves.

How important is it for a manager to have a technical background?

Again, that will depend on the role. This is important for some positions.

What should companies do to encourage YPs to stay on the technical ladder?

We need a robust expertise base, where we attract, develop, and deploy the people and expertise needed to deliver on our growth ambitions. The challenges ahead will require that people also stay

industry professionals into the education and training of new petroleum engineers is an important ingredient of the future of petroleum engineering.

What discipline, what profession offers you the opportunity, and the challenge, to work for the common good in a way comparable to petroleum engineering? Where can a professional 22 or 23 years old be in charge of millions of dollars of assets, have the vast responsibility to care for the health and safety of many, be responsive to the sensitivity of our environment, and make a profound, positive impact on the lives and the quality of life of millions? In many ways, petroleum engineers are world citizens in the work they do and the way they work.

In my years in the industry and in academia, I have frequently observed the dilemmas that young graduates face as they enter the workforce. One question they debate is what type of company they should start with, an E&P company or a service company? Earlier in this article, I pointed out the importance of a strong petroleum engineering curriculum and the role of high-level technology in the petroleum industry. My advice to engineers entering the industry has been constant over the years. I believe the name of the game for young professionals is the accumulation of knowledge and experience. As long as you can gain technical know-how, it does not matter what type of company you work for.

Entry-level petroleum engineers must develop the skills to apply to the conditions and environment in the field. For decades, lasting into the 1980s, there was a belief that you would gain more technical skills from E&P rather than service companies. This may have been true, when the E&P companies were handling nearly all the technical and operational designs and executions of the jobs. The service companies were there to supply the equipment and the personnel that operated the equipment. The events of the mid-1980s, with the

drop in oil prices, changed the role of the service companies. The downsizing of E&P companies created a vacuum that was enthusiastically picked up by the service companies. The service companies became more actively involved in the design and implementation of the operations themselves. We now see that many service-company engineers are actually housed within the E&P companies to oversee the daily operations. The E&P companies are now highly dependent upon service companies to design and execute the jobs for them.

Many of the best practitioners of any technical area in the oilfield are now in the service sector. Therefore, my point should now be clear that as long as you can learn and gain the experiences that you lack, there is no major reason why you should choose one type of company over another. Of course, many look at additional factors to supplement their decision, such as financial incentives and benefits. My advice is that the technical gain from a job offer is the most critical, and if all is equal, then one can look at nontechnical factors to make a job-acceptance decision.

The other question that young petroleum engineers so often debate, usually after a few years on the job,

is whether to choose a technical or a management ladder to advance in their careers. My advice has been constant here, as well. I believe a manager cannot perform well without solid technical credentials. I believe a mediocre technical person can never be a *good* manager. (I and perhaps you have come across many managers who lack good technical foundation.) That is the reason I have emphasized *good*. Being a good and a competent manager can be a rewarding career for the individual and the company. We desperately need such managers in this industry. So, if you hold solid technical capabilities and have developed the soft skills and acumen for leadership, then you would be a *good* candidate for a management position, if that is the direction you wish to take.

In conclusion, petroleum is a high-tech industry that needs talented professionals and experienced individuals who can mentor the younger professionals coming in and moving upward. It needs innovative technology, capital, and skillful collaboration, and it needs to foster and implement socially responsible development. Why are all these needs so important? Because the industry is going to be around for many generations. **TWA**



Ali Ghalambor is American Petroleum Institute-endowed professor and head of the Department of Petroleum Engineering at the University of Louisiana at Lafayette. He received BS and MS degrees in petroleum engineering from the University of Louisiana and a PhD from Virginia Polytechnic Institute and State University. Ghalambor has more than 30 years of industrial and academic experience. He held engineering and supervisory positions at Tenneco, Amerada Hess, and

Occidental, and has served as a consultant to more than 50 petroleum production and service companies, many of them Fortune 500 companies, as well as government agencies, professional organizations, and the United Nations. He has authored or coauthored 10 books and manuals and more than 140 technical articles, published in various journals and conference proceedings. Ghalambor has received the Distinguished Achievement Award for Petroleum Engineering Faculty, the Production and Operations Award, and the Distinguished Member Award from SPE.

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on the technical ladder, even while we maintain our focus on developing our leadership pipeline. The challenges should be attractive enough on both ladders.

What more can the SPE and the industry do to assist in rebalancing the technical and managerial ladders?

SPE has the opportunity to provide inspirational role models for talented young people. It should also challenge businesses to build

and provide such models.

What involvement have you had with professional organizations such as the SPE, and what benefits do you see from them?

In general, I think professional organizations are important arenas for networking and for sharing knowledge and experience. Our people contribute to and benefit from SPE's activities in a number of ways. Our technical specialists often sit on program committees for

international SPE conferences. Some of our employees publish SPE articles to share experience and results in areas such as R&D, reservoir modeling, drilling, and field development.

We also participate actively in the SPE talent council. We share experience, market trends, and benchmarks. In addition, we deliver and improve learning programs within the oil and gas industry. **TWA**