NExT
A Schlumberger Company

Oil & Gas Training
and Competency Development

Competency Management

Using a proven, scalable, five-step process, NExT delivers competency management projects customized to each company's unique needs at different scales—from accelerated team development projects spanning several weeks to immersive programs following asset teams through multiple assignments.

Developing technical teams for targeted growth

Strategy

A sound strategy that considers organizational needs, business direction, competency goals, and job profiles is developed to build detailed job and assignment descriptions.

Competency development

Using strategy inputs, a customized competency model is developed per relevant discipline and technology with a defined proficiency for each level.

Assessment

Through a combination of self-assessment, testing, and individual interviews by technical experts and qualified assessors, a comprehensive organization health check is completed, providing an actionable snapshot that includes strengths, technical gaps, and areas for improvement.

Training

Targeting identified technical gaps, a training program is designed to develop and implement the fastest path for each team's development.

Impact

To verify the impact of the training, an assessment is repeated and compared to the initial assessment. Further recommendations are provided to ensure that each team's technical skills help drive company performance.

Competency Management

Improved performance through targeted training

Benefits

- Alignment of corporate vision, mission, values, and organizational strategy.
- Focus on organizational priorities regarding staff development needs.
- Measurably higher performance from more competent staff.
- Provide return on training investments through targeted training.
- Benchmark organizational capabilities versus industry standards.

An E&P organization's development activity, growth plans, and performance, depend on a talented, technical workforce. To be successful, business leaders must synchronize technical talent with business strategy. Competency management is the best way to ensure this synchronization. For small teams and for hundreds of people spanning multiple asset teams, NExT has helped E&P organizations and professionals worldwide assess their talent, design training programs, and develop technical capabilities.

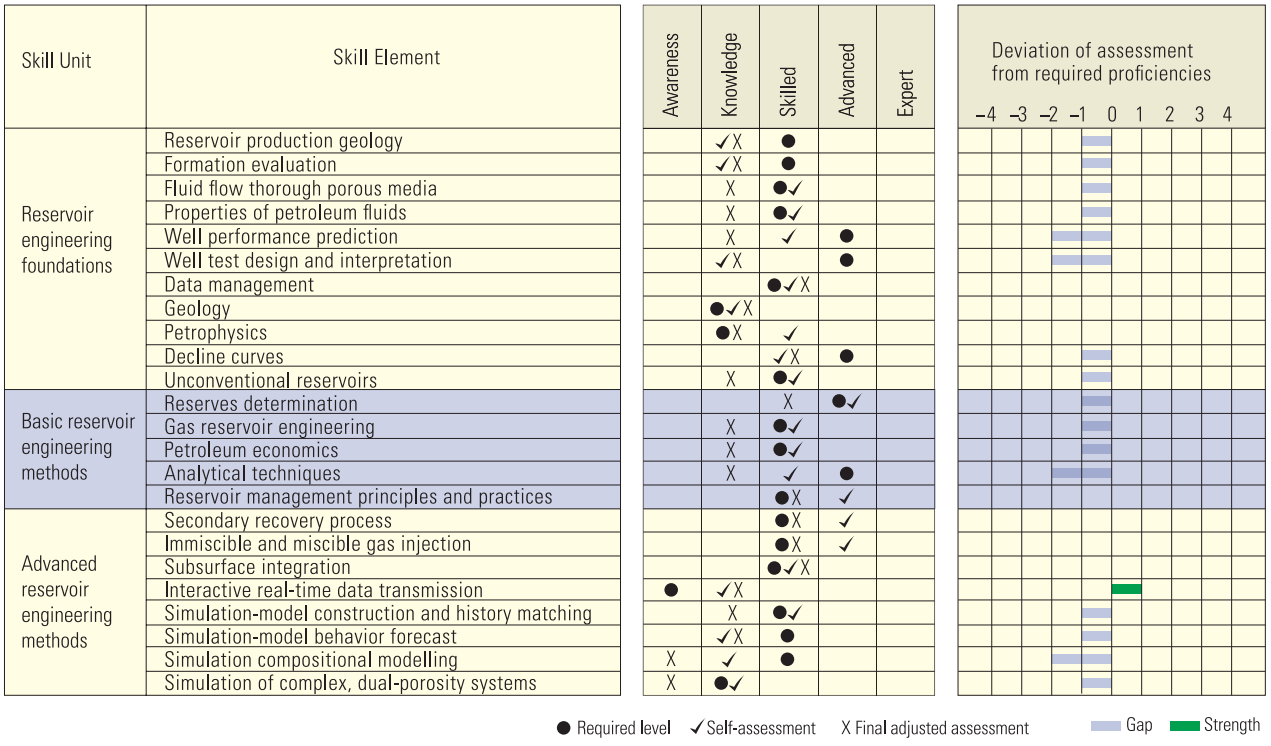
Competency and gaps

NExT training programs are often tailored to meet organizational objectives and technical challenges. A team of NExT competency management experts begin the process by building a tailored, customer-specific competency catalog and matrices for individual disciplines and competency profiles for each job function. Then, it executes competency assessments and gap analysis. The results provide the data necessary for NExT experts to propose priorities for training and development programs and recommend strategies to meet those priorities.

Competency management services include initial assessments, competency-gap analysis, curriculum development, and training as well as follow-up verification to quantify improvements using multilingual competency assessment software at all stages of the process. Our competency assessment software contains built-in knowledge matrices with more than 1,000 job profiles and individual training plans.

To define job functions, NExT subject matter experts work with your team to understand your business and technical needs. They then draft discipline-based competency matrices for jobs within the company. The matrices consist of skill units, skill elements, and required proficiencies for each domain—the field or area of knowledge or specialization. If required, it can include proficiencies for Schlumberger software applications used within the organization.

Winner:
2013, 2014, 2015 Getenergy Training Provider of the Year Award
2016 Getenergy Localization Award



Reservoir engineering job profile. A job competency profile matrix is a collection of skill units, skill elements and proficiency levels; only a portion of a matrix is shown here. A skill unit is a collective job function such as reservoir engineering foundations. A skill element is a subset of a skill unit, such as reservoir production geology. Each skill element has a required proficiency (black dot) that depends on the job, required skill unit and a trainee's experience level. The matrix also includes specific definitions of each skill element (not shown) at each rank and proficiency level; including descriptors, these specific descriptors reduce assessment subjectivity. A participant performs a self-assessment (checkmark), which is adjusted (X) after an SME interviews selected participants. The deviation of the final adjusted assessed proficiency from the required proficiency shows gaps (blue) and strengths (green) in the individual's skills and abilities; where there is no deviation color, the individual has met the required proficiency level.

Expert	Advises the company on the strategic value and direction of the technology. Is considered an authority on the technology by peers and company.
Advanced	Advises others engaged in applying the skill and can teach or mentor others. Has applied the technology on numerous projects in several diverse, complex areas.
Skilled	Applies the knowledge and skills, regularly and independently, in projects and can demonstrate their use.
Knowledge	Has attended a relevant course or training that covers principles and can explain and apply technology under supervision.
Awareness	Recognizes a technology or technique, knows its purpose, can describe it, and understands its value and limitations.

Proficiency levels and their definitions.

To reduce subjectivity in the assessment, the matrix specifies each skill element, rank, proficiency level, and descriptors. A job profile maps the required proficiency level for the skill elements in that job within the domain. Core competencies are elements that are critically important in performing the job or meeting a business or technical challenge. The remaining elements are called complementary competencies.

> “Lukoil Overseas expresses its gratitude to NExT for the knowledge, skill, and competency assessment of the West Qurna specialists. This project contributed to solving tactical issues the company faced in rotating the personnel and strategic issues preparing training plans aimed at developing our specialists. The project was carried out at a high level and within the shortest time frame.”
>
> **Inna Gubareva**
> *Acting Head of HR Division & Organizational Development*

We embrace the most current software technologies to increase the productivity of petrotechnical professionals on exploration, operations, and asset teams.

NExT experts then perform a competency assessment to determine an individual's actual level of knowledge and skills compared with the levels required for the job. The participants in the training program complete a self-assessment questionnaire by selecting the proficiency level they believe they possess for each of the skill elements. Results are compiled and analyzed, and a sample of participants is selected for interviews to validate and adjust the self-assessments.

Finally, gap analysis is performed to compare individuals' assessed proficiency level with the required proficiency level for job functions. If assessed proficiencies are less than required, curriculum planners target these skill gaps for training. When assessed proficiencies are greater than required, these are noted as technical strengths. Gap-analysis results form the basis of recommendations for training priorities and programs that address skill gaps and raise the competency levels of trainees.

Maximizing Software Proficiency—A Case Study†

When companies experience rapid growth, they sometimes need to restructure to adapt to their expanded size and activity. A medium-sized North American independent oil company sought to expand operational activities and add seasoned technical and managerial staff. The company also intended to adopt the latest field and software technologies. In doing so, it recognized the need for effective software training and thus provided generous training opportunities for its technical staff.

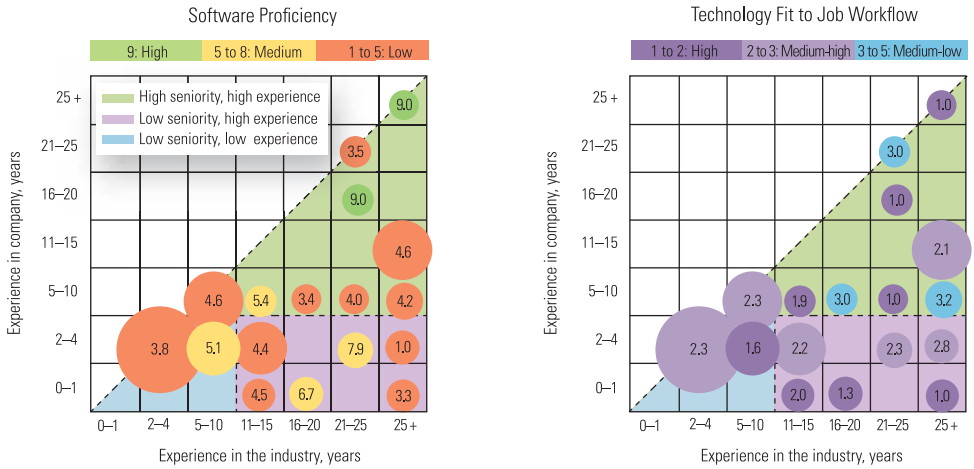
Embracing the most current software technologies is one tactic for increasing the efficiency and productivity of petrotechnical professionals. To benefit from changes in software technology, employees must have a good technical foundation in science and technology along with skills for using specific software products championed in the company. NExT was called in to assess the company's training environment, including the organization's structure, technologies used, types of training offered, current competencies of the staff, and anticipated technology needs.

To begin its evaluation, NExT interviewed the company's management to understand the organization, its current business outlook, and its expectations for technology in the future. NExT placed parameters on these expectations to develop metrics to assess experienced employees, defined as those with 10 years or more in the industry. Most respondents had been with the company for less than 10 years but had more than 10 years of industry experience. A sample group of these employees took a survey that measured their current proficiency with the company's software technologies and workflows. The company expected experienced petrotechnical professionals to be proficient with technology, yet the survey revealed gaps in skills and abilities. This provided NExT with the data necessary to establish targets for improvement.

Assessment results also revealed that the current technology training program did not provide desired benefits to the company. The self-assessment surveys showed that few people were highly proficient in software, and follow-up interviews confirmed these findings. Some petrotechnical professionals used only basic functions provided by the software and, because they lacked awareness and knowledge of software capabilities, these petrotechnical professionals did not use other software applications.

Successful Competency Assessment Projects

- Petroliam Nasional Berhad (Petronas)
- Petróleos Mexicanos (Pemex)
- Sonangol Group
- Société Nationale des Hydrocarbures (SNH)
- Gazprom Neft
- PT Medco Energi Internasional Tbk (Medco)
- Yemen Company for Investment in Oil & Minerals (YICOM)



Self-assessed software proficiency and technology fit. Fifty geoscientists at one company participated in self-assessment surveys about their software proficiency and understanding of how the software fit with their job workflow. The bubble size corresponds to the number of respondents, and bubble colors and numbers represent average scores on software proficiency (left) and job fit (right). Software proficiency is low across the experience spectrum. However, the respondents rated the software as being appropriate for their jobs. These findings suggest that low software proficiency is a result of inadequate training rather than from inappropriate software.

Survey results suggested that, with few exceptions, the company software training program was not meeting the technical requirements of employees, whose software proficiency needed to be aligned with domain experience. Targeted training had to be designed to fill gaps between assessed and expected software proficiency. Knowledge transfer could also be facilitated by fostering a climate in which junior staff members felt comfortable asking for help and expert staff are expected to mentor, coach, and transfer knowledge to junior staff.

The surveys and interviews identified employees' concerns regarding the current state of the organization; their own learning, competency, and software usage; and standard practices surrounding software technology. The survey and interview results suggested that the company's lack of a software vision and strategy had led to haphazard adoption of software. NExT recommended the following strategic solutions to address these concerns:

- Rationalize workflows to align with company strategies and industry best practices.
- Provide more hands-on courses using software critical to the company mission as well as software recognized to be E&P industry standards.
- Establish transparent guidelines for pairing software with asset types and workflows
- Implement benchmarks for skills with recommended software, organized by workflow and discipline.
- Promote and develop technology champions within asset teams to transfer knowledge of assets, facilitate peer-to-peer training, and foster a sense of technical achievement.

After implementing various recommendations, the company saw measurably positive returns on its training investment.

For more information, visit
www.NExTtraining.net

ABOUT NExT

NExT, a Schlumberger company, provides training, competency and professional development services for the oil and gas industry. With a portfolio of over 700 courses, training programs, and competency services covering technical and software skills, NExT, assists in developing the petrotechnical expertise needed to meet today's increasingly complex industry challenges. NExT was awarded the Getenergy's 'Localization Award' in 2016, after three consecutive year wins of 'Education and Training Provider of the Year'.

For a comprehensive portfolio of courses
covering a broad spectrum of disciplines, visit

NExTtraining.net

*Mark of Schlumberger. Other company, product, and service names are the properties of their respective owners.
©2018 Schlumberger. All rights reserved
† Source: *Oilfield Review*, Spring 2013

NExT
A Schlumberger Company