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Case Study: Shell Standard Primavera Education
FACILITATING TECHNOLOGY ADOPTION FOR IMPROVED
BUSINESS PERFORMANCE

Shell is a global group of energy and petrochemicals companies. With around 93,000 employees in more than 90 countries and territories, Shell helps to meet the world's growing demand for energy in economically, environmentally, and socially responsible ways.

Shell wanted to streamline the Planning process across its Projects and Technology division to enable the worldwide adoption of standardized workflows and technology in a customized application. NIIT developed an award-winning learning program to help thousands of users in 22 locations worldwide adopt the standardized application workflows.

Business Needs

With 3.3 million barrels of gas and oil produced every day, and over 145 billion liters of fuel sold in 2010, the sheer scale of Shell's operations is daunting. Shell's extensive operations and complex project implementations therefore have to be executed with precision and detailed planning across the globe. Shell's Projects and Technology division manages the delivery of Shell's major projects and drives the research and innovation to create technology solutions.

> One of the philosophies that guides Shell and has enabled it to become a global leader, is a simple dictum called, ESSA - Eliminate, Simplify, Standardize and Automate. ESSA is one of the core principles behind leadership at Shell and involves eliminating waste, simplifying work processes, standardizing methodologies and automating work processes, thus freeing staff to perform more value-adding work. Using ESSA principles can help companies make savings by streamlining processes and removing inefficiencies.

At Shell's Projects and Technology division, the planning process was executed at a regional level. As a result, planners across Shell's global locations were working in silos and there was no standardized workflow for planning projects. This meant that projects were being planned at an individual team level and there was no knowledge sharing or best practice adoption on a global scale. With a vast group of planners spread across 22 locations with varied experience and skill levels, it was imperative that the project management (PM) and planning process was standardized at a global scale to enable knowledge sharing and the implementation of best practices for maximum business impact.

It was with this vision of implementing ESSA guidelines and ensuring "one way of doing projects" that Shell's Projects and Technology division recently made the transition from a regional PM and planning process to a centralized process where PM processes and tools are globally configured. A major initiative of this transition is the Project Management Standardization Program (PMSP), to deliver the standard tool set throughout Shell. The Global Planning Tools (GPT) project, which is a part of the PMSP, supports Shell's drive towards Top Quartile Performance by applying ESSA directives and contributing to the one Shell way of doing projects.

There are three distinct advantages of the one Shell way of doing projects – first, all transactions are transparent and centrally accessible, second, knowledge is no longer person-specific and can be retained in the system for reference, and third, planners at Shell are making the transition from working in silos to operating in a more collaborative environment.

Training Needs and Challenges

To enable this standardization, Shell chose Primavera as the standard planning application for all detailed planning activities. Oracle's Primavera software application is a Project Portfolio Management solution that planners across Shell use as a tool for planning global capital projects, routine maintenance, well engineering, business process improvement projects and integrated activity planning. The tool has been customized for to meet Shell's specific project and technology requirements to support Shell's complex, large-scale, multi-function planning globally. This customized version is called Shell-Standard Primavera (SSP).

However, as with every large scale technology and application change, there come unique challenges in training, implementation and use. With over 1200 users worldwide and a future plan to onboard another 800 practitioners, mainly in the 'Downstream' organization, training planning engineers on the SSP application had the following challenges:

Technology Adoption

In any organization, a large-scale technology investment cannot realize its full potential until every user of that technology learns how to make best use of the application in a manner that benefits the organization. The biggest challenge was therefore to bring all the planners across 22 locations on the same page with regards to the Planning process and its critical workflows in the SSP application and make the smooth transition from a regional and disparate process to globally configured setup.

Training and On-boarding New Teams

Since expertise on the application was limited, it took approximately nine to twelve hours via Live Meeting sessions to onboard a new team on the SSP application. Since these teams were globally distributed, scheduling two to three sessions per team was a big challenge due to availability of team members and trainers, differences in time zones, and critical time away from work for training.

Understanding and Retaining Complex Working Knowledge

Planning and scheduling can be a complicated process. Workflows are not easy to master and retain in one training session. The SSP is globally configured with specific rules and processes of governance in order to perform successfully and effectively. The main objective of the training program is to educate a novice practitioner or new hire about these rules and how they impact planning workflows. The aim was to ensure that new users could make a smooth transition from working in silos to performing in a globally configured SSP environment. Additionally, the training solution would also provide new and existing users with helpful reference materials that they could access on-demand to better understand the application's standard configuration.

Increase Proficiency in SSP

Since expertise on the application was limited, it took approximately nine to twelve hours via Live Meeting sessions to onboard a new team on the SSP application. Since these teams were globally distributed, scheduling two to three sessions per team was a big challenge due to availability of team members and trainers, differences in time zones, and critical time away from work for training.

Helpdesk Support

Shell's Global Application Support (GAS) team provides helpdesk services for all users of the application. Additionally, Shell follows a GAS/ Primavera Focal Point (PFP) model. Through this model, a member of the team in each discipline is assigned as a Primavera Focal Point (PFP). The PFP is proficient with the application and is expected to cascade knowledge of SSP to his or her team or discipline. However, due to gaps in the existing knowledge transfer process, users of the application would call the GAS team for every small issue. Moreover, the existing Live Meeting training had its own set of challenges in terms of usability, speed or connectivity. Training content was linear because of which training and learners were not challenged enough to think and retain knowledge with a one-time demonstration of workflows. Even though, a large percentage of the common errors and obstacles/errors that users faced on a routine basis could easily be resolved by themselves, or their PFP without GAS involvement, users were still calling the GAS helpdesk for resolution due to lack of adequate knowledge on troubleshooting. One of the objectives of the training was to eliminate recurring calls to the helpdesk for these types of issues.

Solution

The Global Planning Tools project team worked with their preferred learning provider – NIIT to develop a solution for SSP training. The solution was the "Shell-Standard Primavera" e-learning training curriculum of approximately 2 hours seat time hosted on Shell's online training portal – the Shell Open University (SOU). There is also a standalone version that Shell makes available for their Third Party Accessing (TPA) user base, i.e. Integrated Service Contractors, who do use SSP but have no access to the Shell Open University. The Shell-Standard Primavera (SSP) training curriculum was made up of 3 courses: Getting Started, Shell-Standard Primavera Features and Shell Standard Primavera Quiz. This training was designed to provide users with the essential knowledge needed to work in Shell-Standard Primavera and gain an awareness and understanding of the globally configured set up. The courses covered a wide range of topics related to day-to-day working in SSP, getting help from the Global Application Support (GAS) team and useful reference materials.

THE TARGET AUDIENCE

The target audience of the education was Shell Planning Engineers and other Project Services practitioners, who required access to the SSP, spread across 22 locations world-wide. Although the basic qualification of the Planning Engineers was an Engineering Degree and/or Certification as a Planning Engineer, the learner audience varied in experience and skill levels. While some of the junior members of this group were more technically inclined but less experienced on the job, more senior members of the group were those that may have been less technology-savvy but more experienced, with many years of being on the job and a thorough understanding of the traditional planning process. The training program therefore had to cater to a diverse, global audience and bring them on the same page with regards to SSP and the "one Shell way of doing projects".

INSTRUCTIONAL DESIGN METHODOLOGY

The instructional design team at NIIT worked closely with the SSP subject matter experts at Shell's GPT to thoroughly understand the requirements of the training program. The core challenge was not to explain the entire application and how it works but to ensure that planners were familiar with critical tasks and workflows and the specific rules of governance in the practical application of SSP in the planning process after taking the training. The instructional design team therefore approached the solution in a structured method:

Step 1

First, they identified the critical tasks and workflows that users most struggled with. This was done by conducting interviews and discussions with Shell's subject matter experts (SME). These SMEs were the focal points for resolving SSP issues that came to them through the GAS helpdesk. Therefore, they were familiar and well-versed with the common and critical areas that existing users and novices usually struggled with.

Step 2

Second, the identified tasks were further classified based on three essential parameters – degree of difficulty, complexity of execution and frequency of occurrence. The outcome of this exercise was two sets of task lists – first, those tasks that required only a demonstration on their execution and second, those tasks that required users to not only watch a demonstration but also practice what they had learned through an interactive try-it exercise.

Once the tasks were identified and categorized, the course was built with core instructional design elements to facilitate learning.
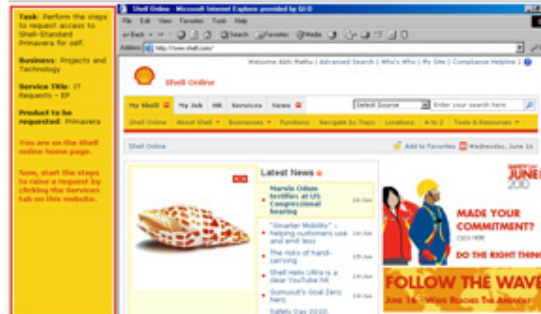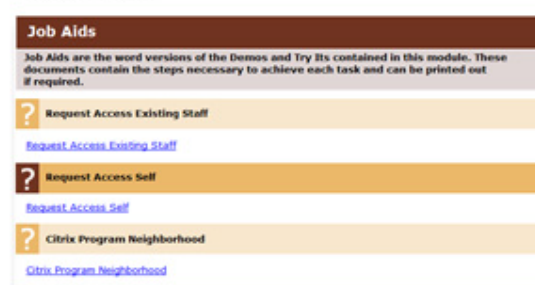
COURSE COMPONENTS

DEMO
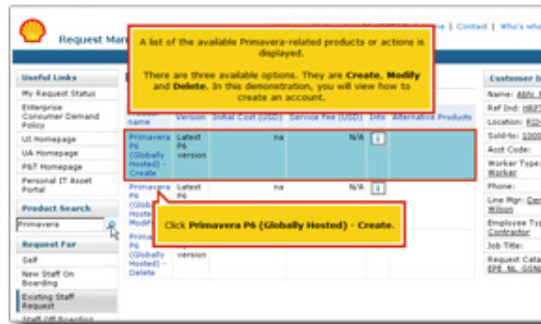
Step-by-step demonstration of critical task workflows which users can watch and learn.
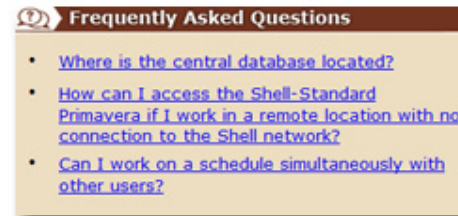
TRY-IT

Interactive practice exercises where users can practice what they have learned. Only those tasks which scored high on one or more of the parameters of difficulty, complexity or frequency have an additional try-it exercise.

TOOLBOX

Printable job-aids of tasks and workflows that users could print on demand during or after their training. This comprised of comprehensive, step-by-step instructions on how to execute a task.

FAQ

Frequently asked questions related to a task or workflow are available on the same menu tree so that users can refer to these after watching a demo or practicing a try-it of the same task.

TROUBLESHOOTING TIPS

Additionally, troubleshooting tips for the task or the workflow are also built in to the menu tree. This is specifically designed so that users can easily refer to the tips and troubleshoot common and easily resolvable issues on their own.

ASSESSMENT

The assessment or mandatory quiz module at the end is designed to test the skill levels of the learners. It is mandatory for all new users to take the quiz and pass it with a minimum score of 80% within 6 weeks of obtaining an access to the SSP. Failure to pass the course results in temporary revoking of access until the course/quiz is re-taken and passed.

Roll-Out

Shell has a substantial number of global licenses for SSP. Therefore, the training had to be rolled out in a phased manner to cover all users. A pilot was rolled out initially to a test group that gave the team adequate feedback about the course.

Once the pilot recommendations had been implemented, the course went live in December 2010. The learning strategy was to make the training mandatory for all new Shell-Standard Primavera users. New users are now contacted by the GAS team when their Shell-Standard Primavera account is created and have six weeks to complete the training. Failure to take and pass the course will result in the user having their access revoked until the course and quiz is re-taken and passed. The training has also been highly recommended for existing Shell-Standard Primavera users and is also available to anyone else in Shell who wishes to take it for awareness or evaluation purposes. PFP's are strongly advised by the discipline leads to take the course and cascade knowledge to their teams, but making the course mandatory for all was seen as a potentially negative strategy.

Subsequently, the Shell-Standard Primavera has been rolled out to more than 22 locations world-wide including The Netherlands, Norway, USA, Canada, UK, France, Nigeria, Gabon, India, Qatar, Kazakhstan, Russia and Malaysia.

USER FEEDBACK

"What an excellent job!! I have taken all three modules and completed the quiz successfully. It is very good training material. Hopefully Downstream users have access to this as well in future, so they can benefit from it as well."

"Excellent achievement! Well done."

Business Impact

The Shell Primavera training has been very effective and well-received by end users. More importantly, the training program has helped Shell meet its core training needs with measurable results:

ADOPTION OF THE SSP SYSTEM AND ONE SHELL WAY OF DOING PROJECTS BASED ON ESSA GUIDELINES

The program has been very effective in ensuring the adoption of new application workflows and following a standardized process across 22 locations in Shell. This has not only ensured that planners follow the One Shell way of doing projects according to the globally configured setup but also justified the per-user license costs of a large-scale technology implementation involving more than 2000 in-house and third-party users worldwide.

TRAINING AND ON-BOARDING NEW TEAMS

The new e-learning program takes approximately 2 to 3 hours to complete and gives users the flexibility of pausing and resuming the course based on the time available. User groups no longer have to convene a Live Meeting across time zones or spend time in Live Meeting sessions that may take almost nine to twelve hours to complete. As a result, the average time spent on SSP application training has been reduced by over 1/3rd per person. This has led to significant savings in cost and time spent on training.

UNDERSTANDING AND RETAINING COMPLEX WORKING KNOWLEDGE

The program has been very well received by end-users. Of the total users who have taken the education, 95.3% have passed the course. All new users who have joined after December 2010 have become proficient in the application within six weeks of receiving their license. The toolbox that comes with the application also provides as a good source of reference for existing users who can refer to and print job-aids of critical tasks and workflows within SSP on demand.

HELPDESK SUPPORT

There have been fewer helpdesk calls from the Shell-Standard Primavera (SSP) users to the Global Application Support (GAS) after the SSP e-learning course was deployed. This relief in time allowed the GAS to onboard several other applications into their support portfolio without increasing FTE (full-time employees).

INCREASE PROFICIENCY IN SSP

The proficiency of the users can be judged not only by fewer calls to the helpdesk but also by the average assessment scores. The average score recorded so far has been 88.2%. The average pass score is close to 90% and the average fail score of only 4.7% of the total users is 60.3%. The assessment scores are a benchmark for the proficiency of the users on the application. Not only this, all new licensed users have passed the program with 80% or more as their assessment score.

FLEXIBILITY FOR CHANGE AND FUTURE UPGRADES

Change is constant and applications and rules of governance may change and evolve with the business. NIIT has therefore ensured that the course structure is modular and easy to change and upgrade. Shell and NIIT continue to work together to ensure that the course is always up to date and incorporates all the impacts of changes in the internal/external environments of the SSP. For instance, Shell global migration to the new Dynamic Citrix Basic Services (DCBS) has changed the way a user accesses the SSP. Shell and NIIT are currently working together to ensure that this change is reflected in the current course.

Not only has the business impact of the solution been strong, the feedback received from existing end users has also been very encouraging.

USER FEEDBACK

"Congrats to you all for compiling one of the most crystal clear set of instructions, tips, trouble-shooters and others, I have seen in the Shell world. I am delighted to see how intuitively the things have been arranged and how comfortable our new planning members will be while going through this course (I almost feel jealous - I didn't get anything like this when I joined.)"

In conclusion, the Shell-Standard Primavera training has brought planners in the Global Planning Tools team one step closer to the "One Shell way of doing projects." By enabling existing and new users to effectively utilize and execute the complex tasks and workflows of the application, the planning process at Shell will smoothly transition from the traditional pattern of working in silos to a more technology enabled, efficient and collaborative process based on Shell's core ESSA guidelines and ultimately, drive business performance and results in that area.

About NIIT Learning Solutions for Enterprises

NIIT is a market-leading, global managed training services company with over 30 years of experience in learning outsourcing. Built on the sound principles of running training like a business, NIIT's Managed Training Services are a suite of best-in-class training processes that enable customers to reduce costs, realize measurable value, run rock-solid operations, and increase business impact. Our flexible and scalable service suite includes curriculum design and custom content development, learning administration, learning delivery and learning technology. NIIT's transformational approach helps companies on both sides of the Learning and Development (L&D) value equation by increasing the benefits generated from L&D programs while optimizing the costs of the L&D system. With a team of some of the world's finest learning professionals and presence in 38 countries, we help the world's leading companies dramatically improve the effectiveness and efficiency of their training. Learn why training is not just our business but our passion at www.niit.com.