

CASE STUDY

Tennessee Department of Environment and Conservation: Improving Customer Satisfaction and Project Performance

CHALLENGE

The Tennessee Department of Environment and Conservation (TDEC) exists to enhance the quality of life for the citizens of Tennessee and to be stewards of our natural environment by:

- Protecting and improving the quality of Tennessee's air, land, and water through a responsible regulatory system
- Protecting and promoting human health and safety
- Conserving and promoting natural, cultural and historic resources
- Providing a variety of quality outdoor recreational experiences

Supporting these critical business initiatives is a team of IT professionals responsible for developing and delivering IT applications to better serve their internal TDEC customers, as well as the citizens and businesses of Tennessee. Responsible for 14 different program areas covering a variety of environmental issues, TDEC's IT team has to meet the demands of a broad customer base. The team's dynamic environment involves a high level of customer engagement and communication. In addition, it requires standard processes for IT Service, as well as structured methodologies for application development. A few examples of these diverse IT projects include:

- DRH Permitting and Inventory Control Management System
- Special Waste Permitting Application
- Conservationist Magazine Subscription Application
- Septic Tank Inspection Application
- UST Mobile Inspection Application
- Oil and Gas Permitting Management System

The TDEC IT team gained the knowledge, skills, and abilities to utilise Agile and ITIL® best practices through IT Academy course curricula in these two critical areas.

SOLUTION

In order to meet these customer requirements, TDEC has adopted a combination of agile methodologies for application development and project management, as well as a set of ITIL processes for IT Service Management. The TDEC IT team gained the knowledge, skills, and abilities to utilise Agile and ITIL best practices through IT Academy course curricula in these two critical areas.

IT Academy has created an ITIL certification track to provide IT personnel with current processes and recommendations for applying the ITIL framework. To ensure successful implementation, a thorough understanding of the framework is necessary. This understanding is measured with a challenging industry certification exam at the end of every ITIL course. Key members of the TDEC team have already achieved the most advanced levels of ITIL certification, including the expert-level Managing Across the Lifecycle Certification.

In order to solidify this understanding, IT Academy developed a series of ITIL Execution Labs focused on the practical application of the framework in real-world IT scenarios. These labs included personnel from TDEC and their central IT colleagues, and provided a forum to discuss organizational strengths and areas for future improvement.

IT Academy has also developed a robust library of agile training courses across multiple job classifications, including IT leadership, project managers, software developers, and business analysts.

DELIVERABLE

As part of their statewide IT workforce development program, IT Academy delivered instructor-led training to almost 700 attendees on ITIL Foundation, ITIL Intermediate Lifecycle Modules, and the expert-level Managing Across the Lifecycle (MALC) certifications. TDEC employees have attended training courses in dozens of different technologies and processes—all designed to give them the knowledge, skills and abilities to support their customers.

IT Academy has also delivered a series of Agile Project Management and Software Development courses to their customers such as Agile Project Management with Scrum, Agile Software Development with Team Foundation Server, Introduction to Agile for Business Analysis, and Agile Software Development and Modeling.

ON A 4.0 SCALE...



RESULT

TDEC employees are being given the skills and abilities to evolve the way the agency manages IT projects, and the IT services they provide to their customers. Leveraging agile methodologies and ITIL best practices, TDEC is improving their relationships with business partners and with the citizens of Tennessee.

Communication gaps are decreasing across all levels, including executive levels of management. They are also collaborating with division partners on ideas for future projects, something not often done in past years.



24%

**AVERAGE PERFORMANCE IMPROVEMENT FROM
SKILLS LEARNED IN THE CLASSROOM**

*Results are an average of reported performance by attendees

POST-COURSE ACCOMPLISHMENTS

“Of all the ITIL classes, I think TDEC has done more in the area of CSI quality assessments than any other ITIL area. We’ve revamped our change request process. We’ve formed a maintenance team to handle those which will be rotating every quarter to mentor and cross train staff. We are constantly re-evaluating our Agile/Scrum teams after and during each project for improvement opportunities.”

— S. Owen, Senior IT Manager
Department of Environment and Conservation

“I have gained a much better working knowledge of Team Foundation Server and its interface for storyboard and task usage. I am using Team Foundation Server on the UST Inspection Mobile application and will be using it with future projects in TDEC.”

— J. Finch, Database Administrator
Department of Environment and Conservation

“IT Academy’s courses and labs have given our team the knowledge of the ITIL framework to help our agency improve our IT service delivery.”

— V. Hutchings, IT Director
Department of Environment and Conservation