Consolidated Contractors Company

Case Study:

How CCC Customized the Moodle Platform to Suit its Global Needs

Konstantinos Tsekos
Information Security, kotsekos@ccc.net

Introduction

CCC is one of the first Arab construction companies and is the largest construction company in the Middle East.

CCC has offices and projects in over 40 countries and a workforce of more than 130,000 employees, with a portfolio that includes:

Oil and Gas Plants, Refineries, Petrochemical Facilities, Pipelines, Light Industries, Heavy civil works, Airports, Stadiums, Road Networks and Skyscrapers, etc.
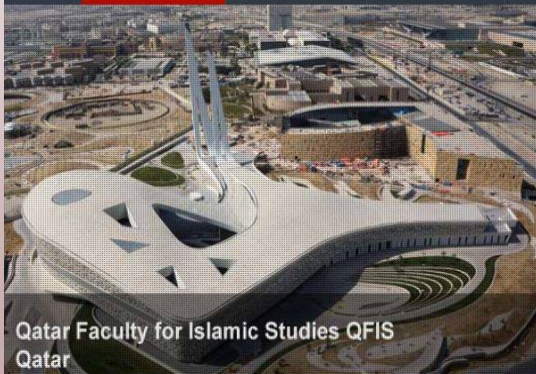
Introduction (2)

The LMS Solution

- Accessibility to all employees (Locally and Remotely)

- Centralized-Organized eLearning content (Easier to administer)

- The market is not static

- Law is not static (Keep organization up-to-date with compliance regulations)

- Take advantage of the latest technology

- Enhance the operational efficiency

- Quick and convenient expansion of eLearning content

- Ongoing Training

CCC Information Security

IT Induction

(Introduction for New Employees)

- Policies, Procedures, Work Instructions

- Information Security Awareness
    - Brochures, Self Assessment Quizzes

ISO27001: It is a systematic approach to manage sensitive company information so that it remains secure. It includes people, processes, and IT systems by applying a risk management system.
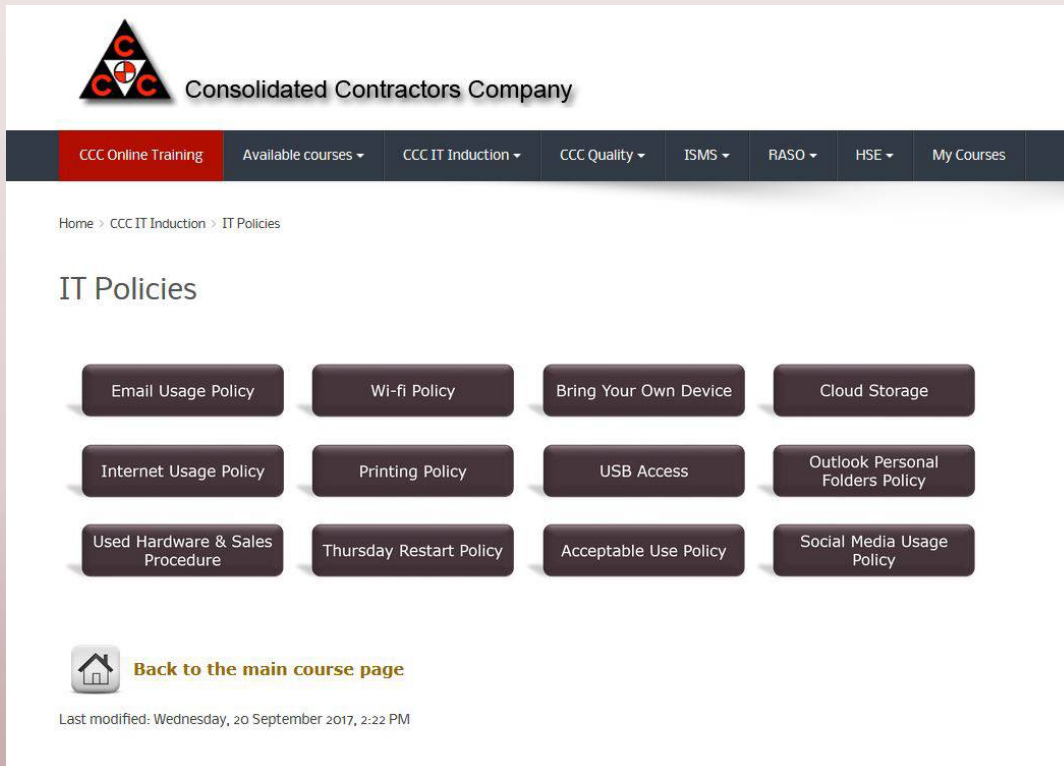
Information Security

IT Induction Repository

Information Security Archive

Goals (Information Security)

IT Induction Repository

Information Security Archive

- Information Security Awareness Brochures (Information Security Threats)

- Self-Assessment, Quizzes

- Maintain records

CCC QA/QC

Quality Assurance/Quality Control (QA/QC)

Training for CCC Project Employees: Engineers, Supervisors, and Inspectors, etc. When they join a Project for a first time.

It is designed to provide the Project Employees with the essential awareness about the CCC Project Quality System

Benefits

– Reduced Training Cost

– Efficient and Effective Training

– Immediate Results and Feedback

– Better Retention

QA/QC Induction Training

Training Process

```
Employee mobilized to Project
              ↓
Employee receives a training
notification (E-mail)
              ↓
Employee reads Quality training
material
              ↓
Employee attempts the training
              ↓
Employee receives his certificate
```
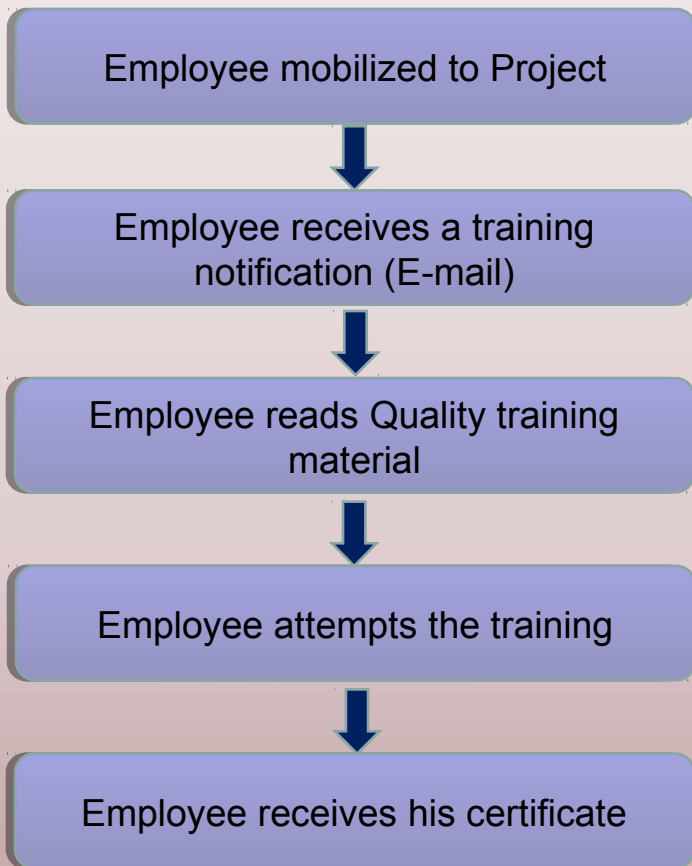

Consolidated Contractors Company

CCC Online Training | Available courses ▾ | CCC IT Induction ▾ | CCC Quality ▾ | ISMS ▾ | RASO ▾ | HSE ▾ | My Courses

Home › Quality Management System Introductory › Induction Training Material

Induction Training Material

9 of 48 — + Automatic Zoom

5. QA Vs QC

Quality Assurance (QA)

✓ Activities are focused on the processes used to create the deliverables

✓ Quality Assurance makes sure you are doing the right things, the right way

✓ Assurance of Quality (QA) is a **proactive or preventive process** to avoid defects

Quality Control (QC)

✓ Activities are focused on the deliverable (product) itself

✓ Quality Control makes sure the results of what you've done are what you expected

✓ Quality Control (QC) is a **corrective process** to identify the defects in order to correct them

Setup - Implementation

- Microsoft Windows 2012 server
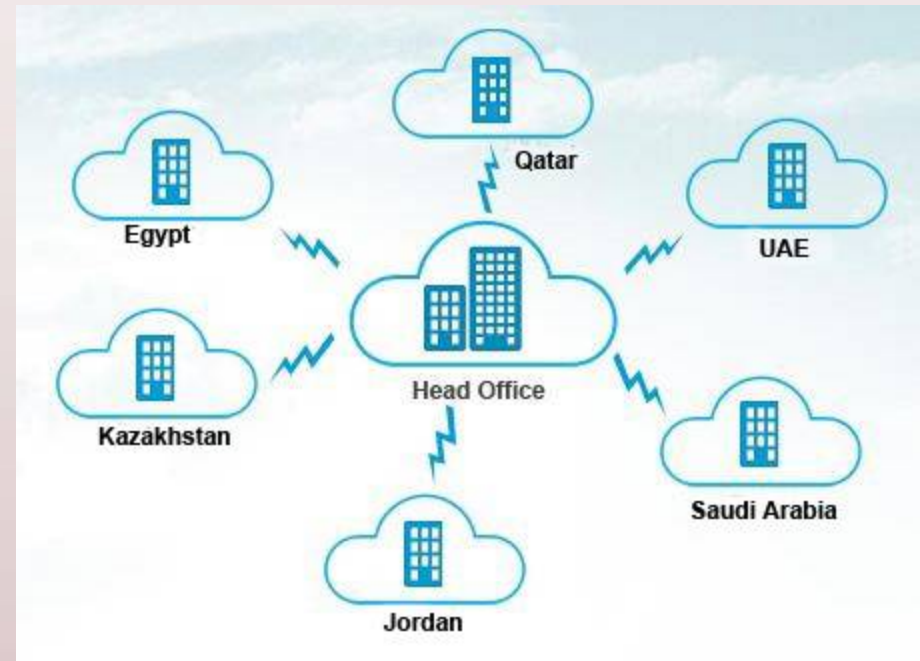- IIS 8/ Webserver
- Moodle server (Plugins)
  - Training material, Quiz, Questionnaire, Certificate
- Connectivity through Virtual Private Networks (VPNs)

Setup - Implementation

Connectivity

Through Virtual Private Networks (VPNs) to more than 40 countries.

Site-to-site VPN allows offices in multiple fixed locations to establish secure connections with each other.

Plugin Customization

MOODLE AUTHENTICATION PLUGINS

Multi-Forest Environment (Multiple Domains)

   LDAP (Authentication plugin)

   LDAP (Authentication plugin using single-sign-on **NTLM SSO**)
   NTLM authentication depends on LDAP authentication
   NTLM (Single-Sign-On): NTLM SSO uses sAMAccountName
   (the pre-Windows 2000 logon account name)

LDAP plugin Code development (Authenticate using the **UPN)**

Plugin Customisation

LDAP (Authentication plugin using single-sign-on **NTLM SSO**)

Benefits

- Enhances the user experience
- Boosts productivity
- Improves compliance and security capabilities

Future plans

Moodle Gamification

- Interactive Memory Games
- Experience Points

Thank You