



# IT Industry Training

**Mobilising Funding Programmes and Incentives to Scale-up Best Practices**

Kevin Kelly

Global Director

AWS Certification & Education Programs

# What is Cloud Computing?

Cloud computing is the on-demand delivery of compute power, database, storage, applications, and other IT resources via the internet with pay-as-you-go pricing.

Cloud Computing is part of a major trend called **Industry 4.0**, which introduces automation and data exchange in manufacturing technologies.

It includes cyber-physical systems, the Internet of Things, cloud computing and cognitive computing (ML, AI).\*

“Machine learning is hugely important to our growth, and we’re pursuing a variety of AWS machine learning services, including Amazon SageMaker, to **personalize the MyRyanair portal** for every unique traveler.”

- John Hurley, Chief Technology Officer, Ryanair



Enhances and personalizes customer experience



Automatically detects flight surge demand



Routes support requests to the right assistance type

# Organizations Are Prioritizing Cloud

## Areas of Investment and Focus



### Small and Medium Enterprises

- Cloud Computing
- Cybersecurity
- Virtualization
- Networking & Wireless LAN
- Internet of Things (IoT)



### Large Enterprises

- Cloud Computing
- Cybersecurity
- Virtualization
- Cognitive Computing & Machine Learning
- Internet of Things (IoT)

“The main objective of the European Commission is to enable and facilitate a faster adoption of **cloud computing** throughout all sectors of the economy. (...)

That could mean an additional EUR 45 billion of direct spending on cloud computing in the EU in 2020 as well as an overall cumulative impact on **GDP of EUR 957 billion**, and **3.8 million jobs by 2020.**”

-KPMG report for the European Commission: [“The role of European Structural and Investment Funds in financing cloud computing projects,”](#) 2017

# Cloud Skills Challenge

“Only **35% employers** report feeling confident that new recruits [hires] are well prepared with hard technical skills and ‘soft skills’.”



Source: [Bloomberg Next](#) Report

“An estimated **30%** of global IT **jobs will be left open by 2022**, as employers compete for workers with digital skills in artificial intelligence, IoT, blockchain, and other areas.”



Source: IDC FutureScape: [Worldwide CIO Agenda 2019 Predictions](#)

# Cloud Skills Challenge

Cloud is changing the way we design, develop and manage IT infrastructure.

Required skillsets are now a combination of technical, analytical, and problem-solving skills.

## Technical Skills

- Cloud Computing
- Data Analytics
- Mobile and IoT Development
- Digital and Cloud Security

## Soft Skills

- Comfort with Remote Management
- Data-Driven Decision Making
- Passion for Learning
- Change Management
- Iterative and Incremental Solution Building

# AWS Approach to the Cloud Skills Challenge



## Cloud Role-Based Curriculum

Cloud Practitioner,  
Solutions Architect,  
Developer,  
Systems Operations



## Skills Validation

Industry-leading  
certification  
exams

Professional  
development  
for educators



## Education Programs

Free curricula for post-  
secondary institutions  
and workforce  
development  
for non-traditional  
learners



## Employment Readiness

Connecting cloud  
ecosystem  
employers with  
graduates



# Curriculum Components



## Lecture Modules

Technical concepts are presented to students in a live lecture and/or digital lectures



## Hands-On Labs

Guided exercises in the AWS Console allow students to practice skills in a sandbox



## Knowledge Assessments

Multiple-choice quizzes for each module motivate students and assess comprehension



## Project Exercises

Scenario-based projects require students to develop and implement an AWS solution

# Our Experience in Partnering in Europe

AWS is a Member and a Pledger in the **European Digital Skills and Jobs Coalition**.

We are a Member of **DIGITALEUROPE**, where we chair Digital Skills Working Group.

We have worked with the European Commission to pilot AWS Certification inclusion in **ESCO: European Skills, Competences, Qualifications and Occupations**.

We have participated with CEN (European Committee for Standardization) in the refresh of the **European e-Competence Framework** for IT professionals.

# Our vision

Governments, Academia, and IT industry working together to increase the digital talent pool and elevate the next generation of Cloud Builders.



# Thank You!

Kevin Kelly

Global Director

AWS Certification & Education Programs

