



TENDENCIAS Y DESAFIOS PARA LA UNIVERSIDAD

VI SEMANA DE INMERSIÓN TECNOLÓGICA

Organizan:

Dirección de Docencia
y Desarrollo Profesional

Centro de Tecnologías
para la Academia

CTA

Formando para los desafíos y
las los trabajos que aún no
existen

Diego Sierra
Education Technology Advisor
Microsoft Colombia

Formando para los desafíos y las trabajos que aún no existen



Diego Sierra
Education Technology Advisor
Microsoft Education

IX Congreso de Informática Educativa
Enero 2017. Universidad de la Sabana



**ESTAMOS EN EL MEDIO DE
GRANDES CAMBIOS**

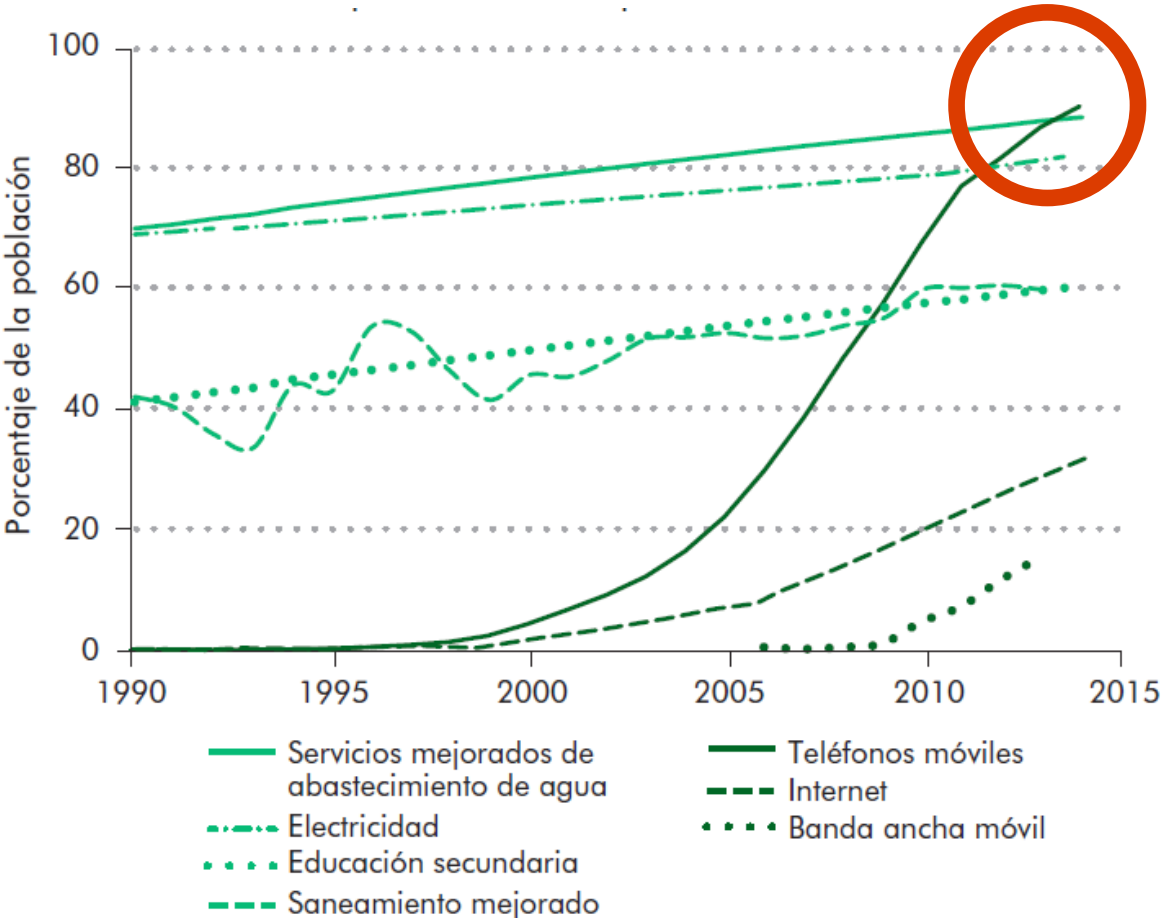


2005 – POPE BENEDICT

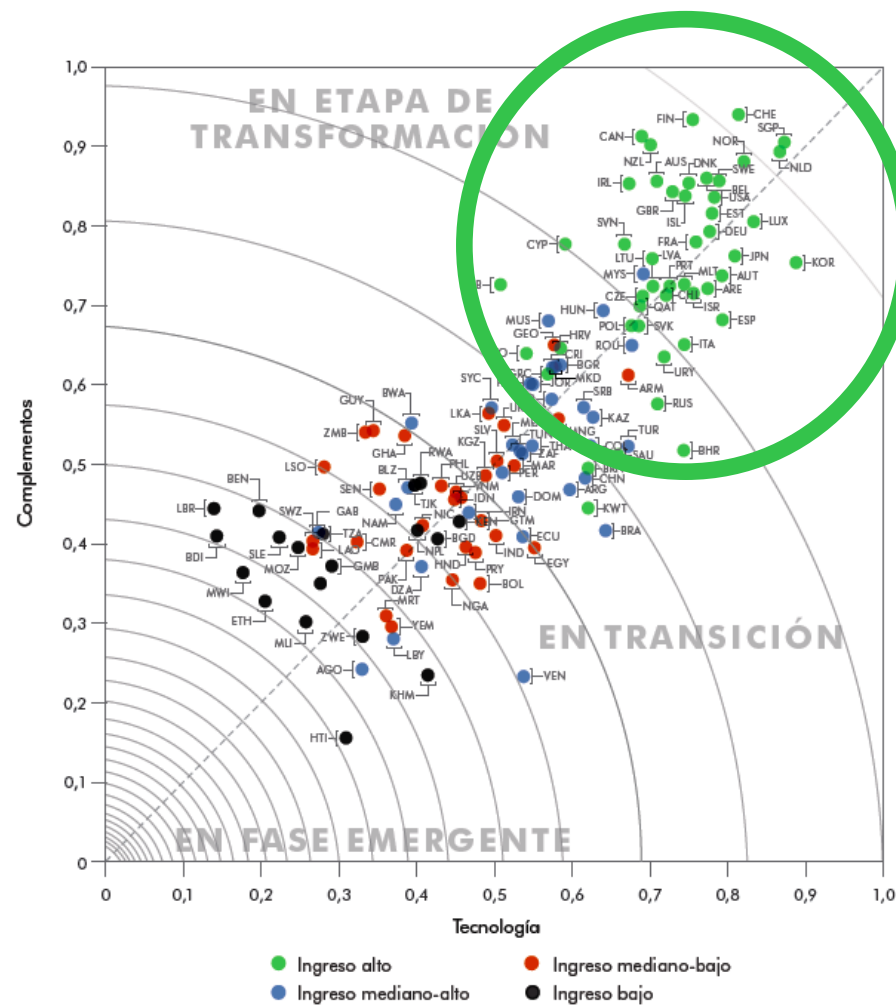


2013 – POPE FRANCIS

El acceso a tecnología en los países en desarrollo está creciendo sobrepasa a la mayoría de servicios básicos.



La tecnología y la innovación son un punto crítico para el desarrollo.



Fuente: Equipo a cargo del Informe sobre el desarrollo mundial 2016. Datos en http://bit.do/WDR2016-Fig0_21.

Nota: La tecnología se mide con el Índice de Adopción Digital (IAD). El IAD se basa en tres subíndices sectoriales, referidos a las empresas, las personas y los Gobiernos, a los que se asigna igual peso. $IAD (economía) = IAD (empresas) + IAD (personas) + IAD (Gobiernos)$. Cada subíndice es el promedio simple de varios indicadores normalizados que miden la tasa de adopción de Internet en los grupos pertinentes. De manera similar, el valor de los complementos es el promedio de tres subíndices: facilidad para poner en marcha una empresa, años de educación ajustados en función de las habilidades, y calidad de las instituciones.

“ **LAS HABILIDADES SON CLAVE PARA LA
PROSPERIDAD DE LAS NACIONES Y PARA
GARANTIZAR MEJORES VIDAS PARA
INDIVIDUOS EN EL SIGLO XXI** ”

–OECD GLOBAL SKILLS REPORT

Retos inminentes en la educación superior



Gestionar el aprendizaje a lo largo de la vida



Velar por **Pertinencia**: formando hoy para los trabajos de mañana

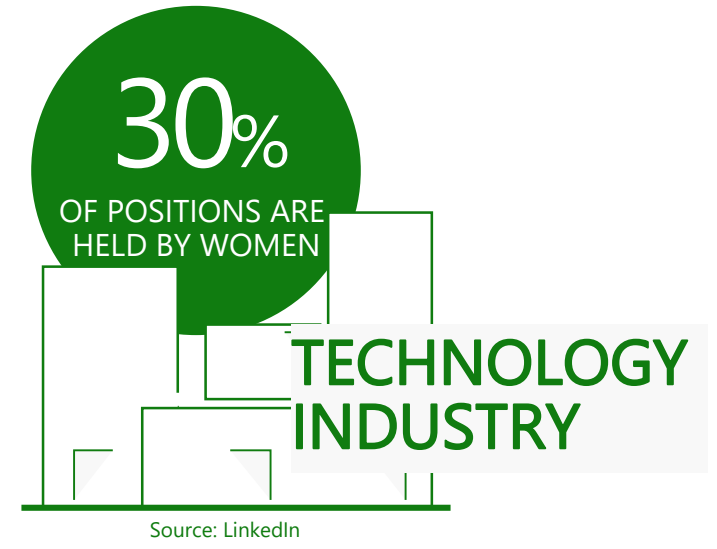
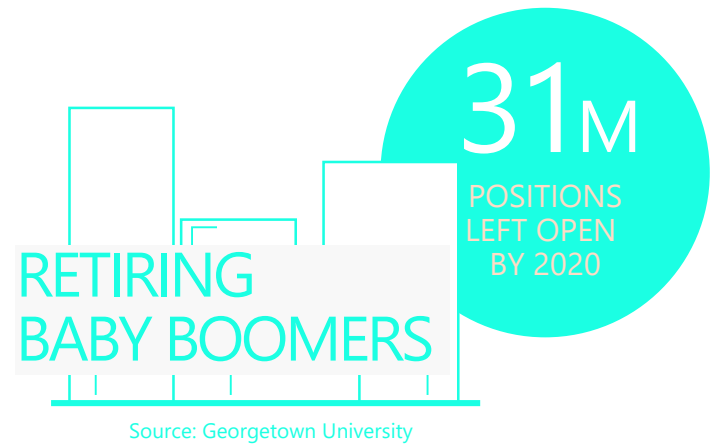
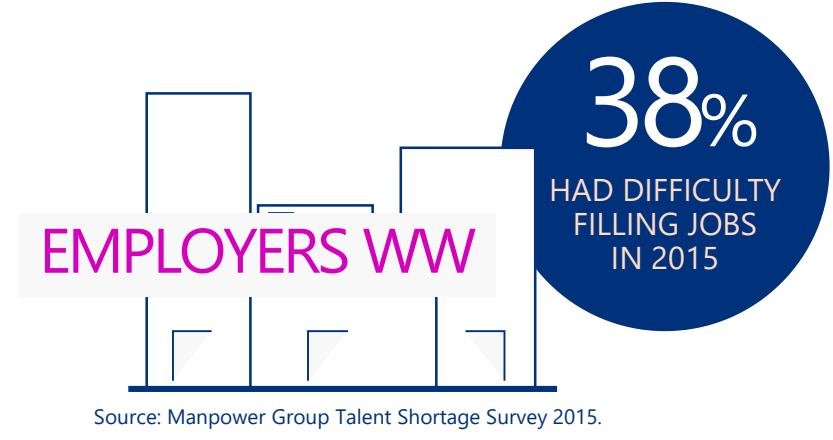
Mobilidad social

Equidad

Cerrar brechas de empleo

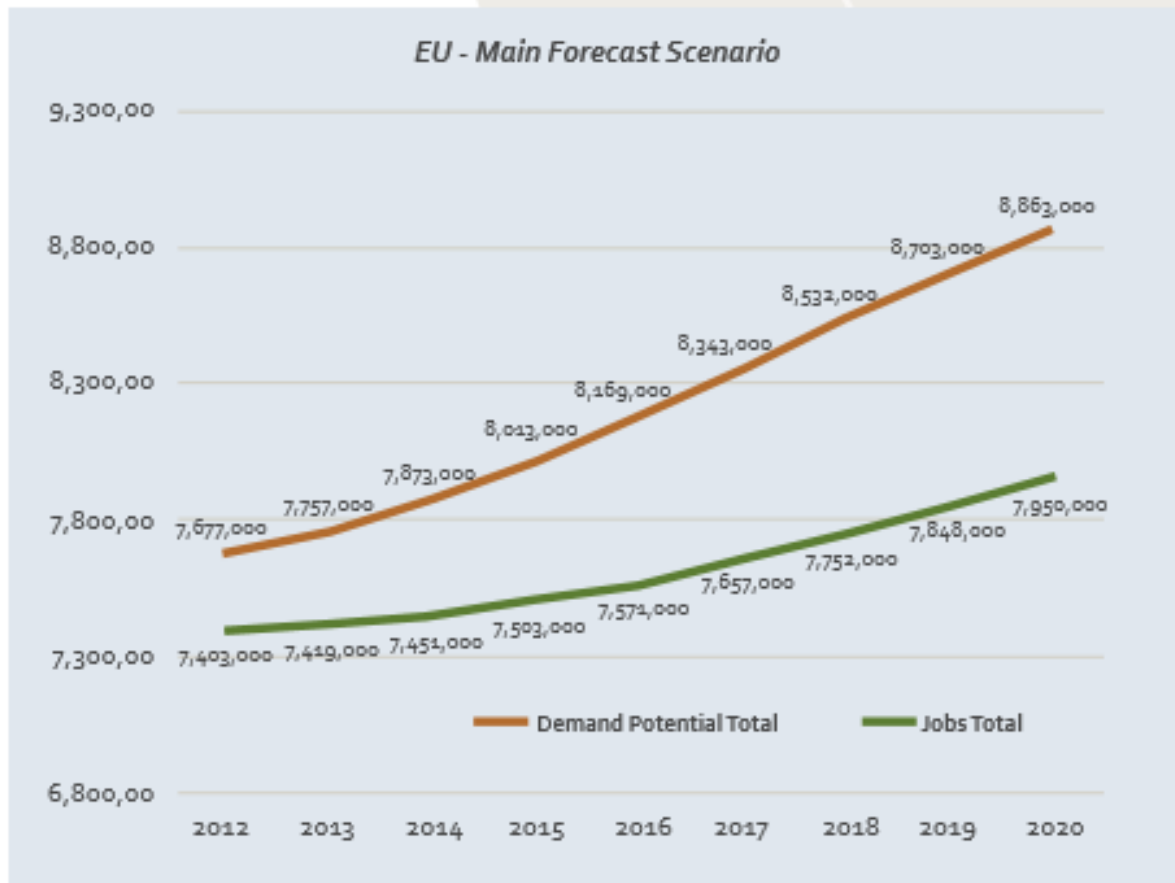
Innovación y desarrollo

LA BRECHA DE HABILIDADES



Proyección de oferta y demanda en e-skills Comisión Europea.

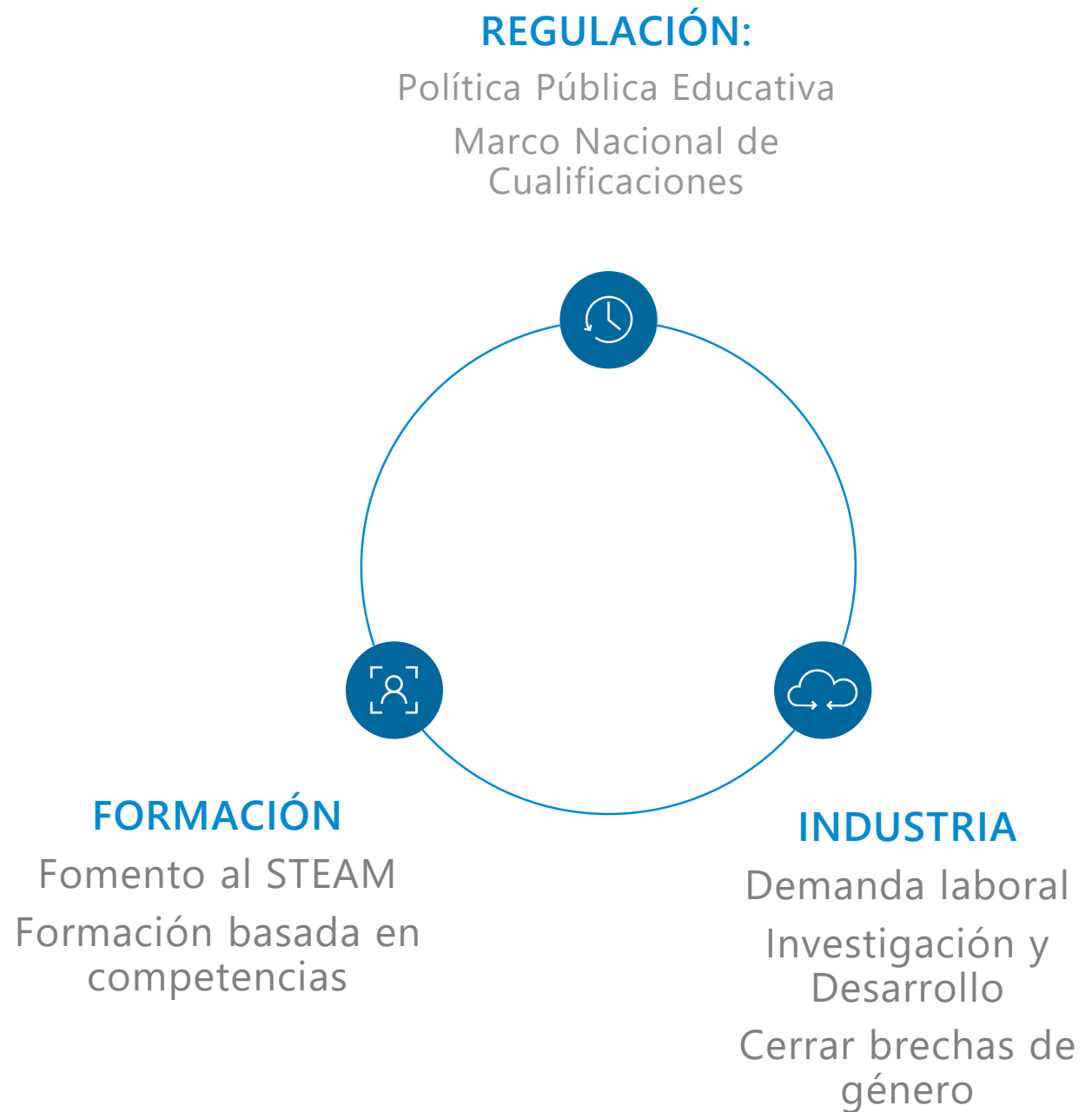
ICT workforce development and ICT worker demand potential in Europe (EU27)
2012 – 2020 (main forecast scenario)



This scenario would imply modest job growth of 100,000 until 2015, with a structural shortage of 509,000 caused by lack of available talent. It also suggests that 509,000 jobs could be created if the skills were available. The bottlenecks are largest in the UK, Germany, and Italy - which together would account 60% of all vacancies in Europe.

Comparing the three scenarios, potential vacancies range from 449,000 to 558,000 in 2015, and from 730,000 to 1.3 million in 2020.

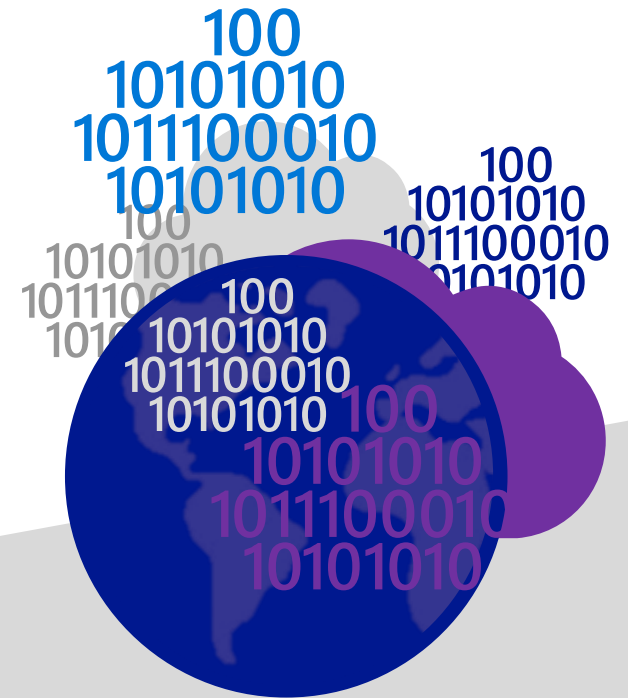
Responsabilidad Compartida



Microsoft en STEAM



**La cantidad de datos
incrementará 10x cada
año, con 85% de nuevos
tipos de información**



1

“

**CIENTÍFICO DE DATOS: EL
TRABAJO MÁS SEXY DEL
SIGLO XXI**”

”

-DAVENPORT, HARVARD BUSINESS REVIEW



**CERTIFICADO Y
CURRÍCULO PARA
CIENTÍFICOS DE
DATOS**



Pilot in Development

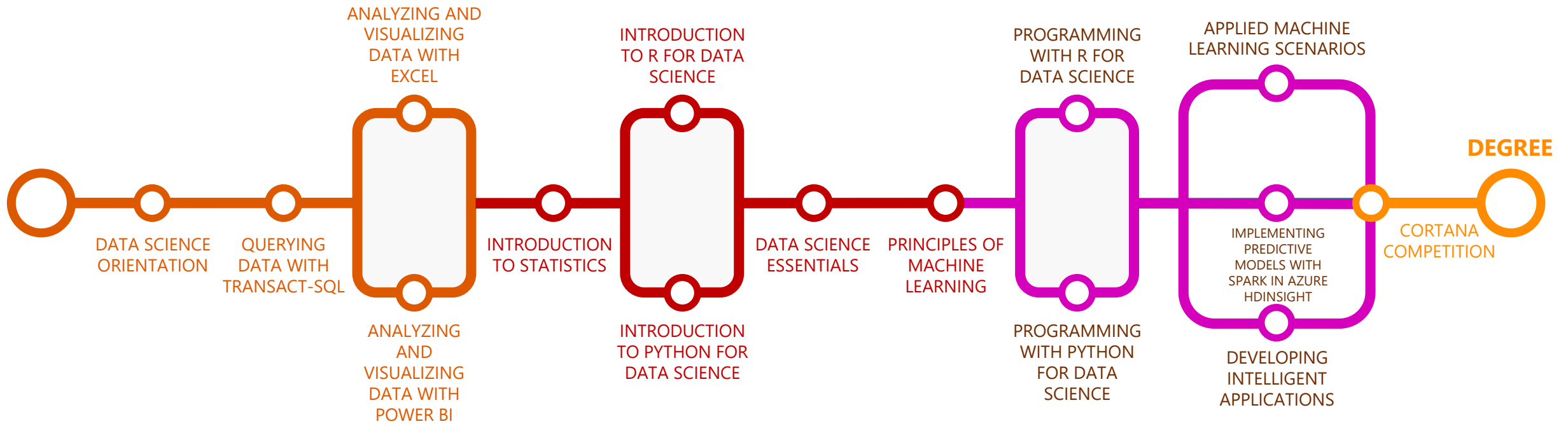
DATA SCIENCE TRACK

FUNDAMENTALS

CORE DATA SCIENCE

APPLIED DATA SCIENCE

PROJECT



Microsoft SQL Server



Excel



Azure Machine Learning



HDInsight



python™



Hi, I'm Cortana.

<https://academy.microsoft.com/en-us/professional-degree/data-science>

LeX Launched Curriculum Pilot on edX May 16th

Partners, Customers, and Employees

8 Data Science skills
1.5 million jobs

Opportunities for Data Scientists—one of today's hottest jobs—are rapidly growing in response to the exponential amounts of data being captured and analyzed. Companies hire Data Scientists to find insights and to solve meaningful business problems. Get the real-world knowledge and hands-on experience you need to succeed in one of these new jobs. Prove that you have what it takes, with a Microsoft Professional Degree.

Microsoft Professional Degree in Data Science

Microsoft consulted Data Scientists and the companies that employ them to identify the requisite core skills. We then developed a curriculum to teach these functional and technical skills, combining highly rated online courses with hands-on labs, concluding in a final capstone project. Graduates earn a Microsoft Professional Degree in Data Science—a digitally sharable, résumé-worthy credential.

The program opens soon! To be notified, submit your email address.

Enter your email address

See Microsoft Privacy & Cookies.

Why choose a Microsoft Professional Degree for your Data Science career?

Get skills that employers look for. [Learn more >](#)

Use hands-on labs with the latest tools. [Learn more >](#)

Be part of a vibrant community. [Learn more >](#)

Gain the skills you need to get the job you want

When you apply for a job in data science, employers want to know whether you can analyze and visualize data with Excel or Power BI and whether you can use R or Python to explore the data. They also want to know that you understand key topics, like statistics and machine learning. To see each concept and its associated skills and courses, click the following topics.

- Data Science Orientation +
- Query Relational Data +
- Analyze and Visualize Data + Multiple training options
- Understand Statistics +

Instructions
These courses are presented in a suggested order, to guide you as you build your skills, but this order is only a suggestion. If you prefer, you may take them in a different order. You may also take them simultaneously or one at a time, as long as they are completed within their specified session dates.
If multiple course options are listed, you are required to complete only one of the options.

Price
You may audit any courses, including the associated hands-on labs, for free. However, to receive credit towards the Microsoft Professional Degree, you must purchase a Verified Certificate for each of the ten courses you take in the

Curriculum

- Reviewed with **50+ Data Science** professionals & **2 Universities**
- Microsoft technologies (BI, Cortana Analytics), and Open source (Spark, Hadoop)
- 4 units - 3 courses each that average 4-8 hrs/week
- Online Labs & Assessments
- Final capstone project on Cortana Intelligence Platform, similar to a Kaggle competition

Partner Engagement

- **80 Partners** enrolled **235 total learners** in pilot
- **2 ISV's*** & **6 Learning Partners** committed to **Open edX** on Azure pilots
- **Over 80 trainers (MCTs)** participating and reviewing

Pilot Stats

- **911 registered** (676 FTE, 235 Partners)
- **36 FTE Teaching Assistants**
- 100+ instances **Feedback incorporated** (lean experiment)
- 2,319 Course **completions** with verified certificates

What people are saying....

...such an exciting (and much needed) initiative. I am very excited to see this effort come to fruition! Thanks to you and your team for driving such a valuable program. -SR Recruiter, Microsoft

Kudos to the MS folks that chose to use DataCamp as a partner for education delivery. Wow, they do an excellent job and their R programming lab interface is brilliant. Well done! - Platform Architect

These classes are taking me a lot longer than I anticipated. - QA

...material is well-organized and very well-produced. I would like to see more options/support for learning and referencing the material in different ways rather than just using the video content. - RBA Consulting

The level of teaching and the depth of content... is by far the best I have ever done for a Microsoft certification. I have learnt more in the last months than perhaps any of my other certificates... - Cloud Architect

* EdCast, Appsembler

**QA (UK), NIIT (India), Info Trek (Malaysia), DDLS (Australia), LLPA (EU), FastLane (EU and US)

Viewing 19 results matching

Microsoft



TOP COURSES:

EXCEL FOR DATA ANALYSIS & VISUALIZATION

INTRODUCTION TO R

PROGRAMMING WITH C#

DATA SCIENCE AND MACHINE LEARNING
ESSENTIALS

INTRODUCTION TO C++

INTRODUCTION TO JQUERY

INTRODUCTION TO PYTHON

Refine your search

- Current
- Starting Soon
- Upcoming
- Self-Paced
- Archived

Courses & Programs

- Verified Courses
- XSeries Programs
- Mobile-friendly
- Schools & Partners

Choose a School

Level

- Intermediate
- Advanced

Starting Soon
Starts: July 11, 2016 - Self-Paced

Current
Self-Paced

Starting Soon
Starts: July 11, 2016 - Self-Paced

COURSES ON EDX

70 COURSES

STRATEGIC TECHNOLOGIES

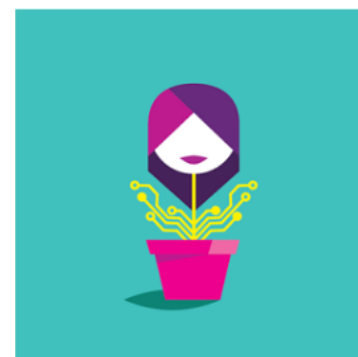
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“ 26% DE LA FUERZA LABORAL DE CIENCIAS DE COMPUTACIÓN SON MUJERES, Y EL 50% ABANDONA SU CARRERA DESPUÉS DE 10 AÑOS. ”

-LINKEDIN DATA & AMERICAN ASSOCIATION OF UNIVERSITY WOMEN

**OPORTUNIDADES DE
CONOCER Y APRENDER
SOBRE CARRERAS EN
TECNOLOGÍA**



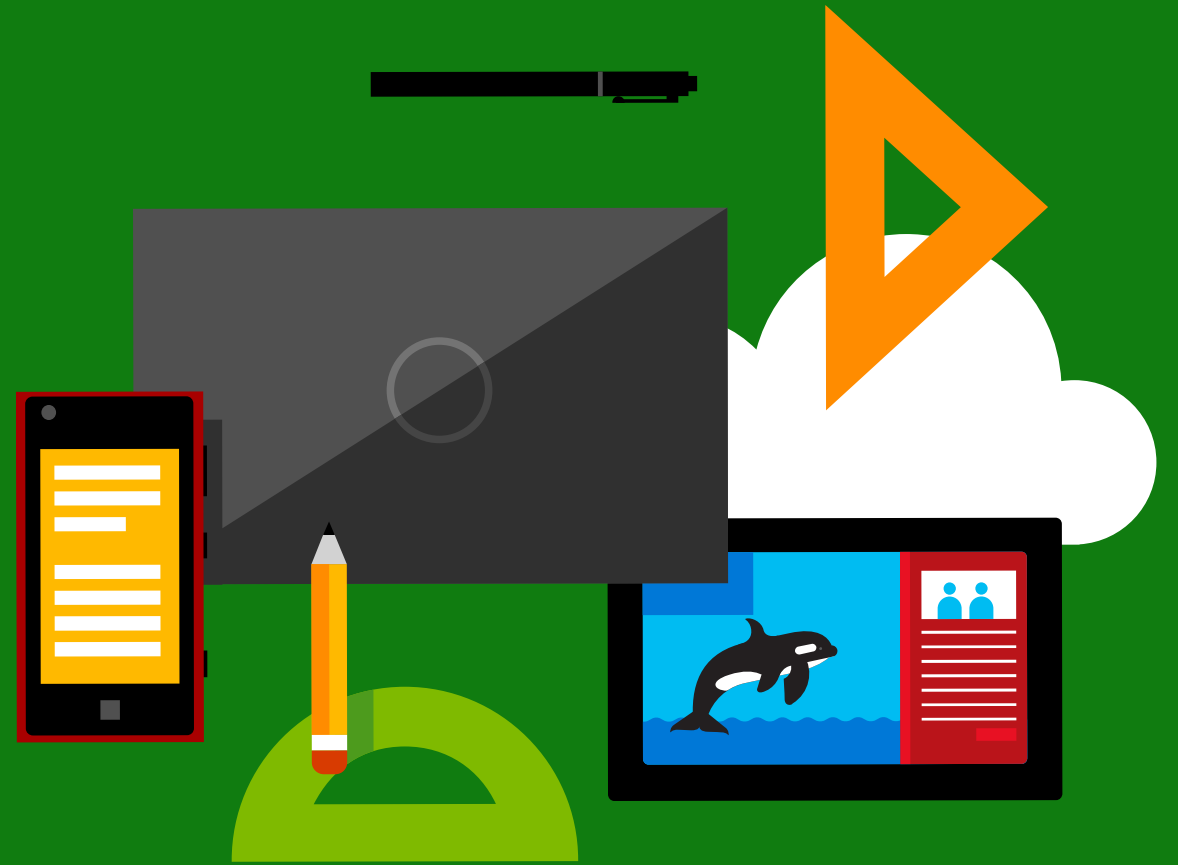
DigiGirlz





Gracias,

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