

FACT SHEET

Pilot for Data Sciences Analytics Training

Singapore is pushing towards becoming the world's first Smart Nation; one that is able to use technology to enhance transport, healthcare and other public services. Singapore will need to build up multiple aspects of our national capabilities – from infrastructure, industry to governance – that will improve the quality of life for individuals and business productivity for enterprises. In a Smart Nation, we also seek to create an anticipatory Government that can better serve our citizens and empower citizens to make better decisions and meaningful choices to better their lives.

The use of data sciences and analytics is at the heart of the Smart Nation. As Singapore moves to become a Smart Nation, there is a need to ensure that there is sufficient data sciences and analytics manpower available. These professionals are needed by businesses, government and ICT companies to leverage the exponential data surge for productivity, competitiveness and growth.

Background

With this tremendous growth of data in the recent years, and the potential of leveraging data sciences and analytics to unlock insights from data, there is expected to be a large shortage of data sciences and analytics professionals worldwide. McKinsey forecasts that there will be a shortage of 140,000 to 190,000 data sciences and analytics professionals in the US by 2018.

Similarly, Singapore faces a shortage of data sciences and analytics professionals. IDA has already initiated a number of initiatives over the past few years, including encouraging our local universities and polytechnics to develop data sciences and analytics programmes at the diploma, undergraduate and post-graduate levels. IDA has also introduced a number industry collaborations for on-the-job training and specialist certifications that enable both new job entrants and working professionals to develop data sciences and analytics skillsets. IDA programmes are expected to meet industry demand by 2015.

Massive Open Online Courses (MOOCs) offer many high quality courses online from leading world class universities. MOOCs are usually free, with some charging a fee for certification, testing or supervision. MOOCs are convenient as students can choose to learn at their own time, and at any location. MOOCs provide a new opportunity to transform learning and higher education, with the ability to scale massively and worldwide.

Pilot Overview

The Pilot for Data Sciences & Analytics Training will leverage the Coursera MOOC platform's data sciences specialisation provided by Johns Hopkins University, to complement the development of data sciences and analytics manpower in Singapore.

The data sciences specialisation track has 10 modules, including a final capstone project. IDA will work with local major organisations from IT, Business, Government, Universities and Research Institutions in Singapore to drive support and commitment to provide participants for the data sciences specialisation track.

IDA will provide co-funding for each of the participants that successfully complete the specialisation track. IDA also intends to host voluntary weekly meet-up sessions, inclusive of facilitators, to support participants to follow through and complete the courses. IDA, together with participating organisations, will evaluate the outcome of the pilot; and will consider additional students, courses, and other IT specialisation tracks accordingly.

Impact to People and Businesses

The pilot aims to demonstrate the effectiveness of using an MOOC platform to train Singaporeans in critical technology skills such as data sciences and analytics.

- The pilot will train 200 Singaporeans in data sciences and analytics, from content developed by an internationally recognised university and provide certification for successful course completion
- The pilot aims to demonstrate MOOCs as a viable means of skills upgrading for organisations and individual citizens.

Programme Status

The pilot is scheduled to start in August 2014 and will be targetted at working professionals from business, IT and other disciplines. The pilot welcomes all participants that have an interest in developing data sciences and analytics skills.

Learnings from this pilot, will give IDA the opportunity to refine the programme to determine how it may be effectively refined and scaled to train more data sciences and analytics professionals in Singapore as necessary. Additionally, the use of MOOCs as a complementary manpower development platform for critical ICT skills will be assessed and leveraged as needed.

For media clarifications, please contact:

Infocomm Development Authority of Singapore

Christopher Koh (Mr)

Manager, Corporate and Marketing Communication

Tel: +65 6211 1709

E-mail: christopher_koh@ida.gov.sg