

DATA ANALYTICS

As Singapore moves to become a Smart Nation, the Singapore Government has identified data analytics as an important growth sector and an important enabler for businesses and government to raise productivity, competiveness and growth.



BIG DATA RISING IN SINGAPORE

Being at the heart of Asia, Singapore's location is seen as providing the perfect setting for looking understand Asian companies to consumers. With its culturally diverse population, Singapore offers the ideal location to test new made-for-Asia innovations, and a broad economy provides access to industry-specific knowledge crucial for coming up with the best analytics.

Besides а robust information technology infrastructure, Singapore has strong connectivity critical for hosting and processing huge volumes of real time data. In addition, Singapore has the security capabilities to host and process large amounts of highly proprietary data.

WHY SINGAPORE?



World-class IT infrastructure and stability



pan-Asian expertise and industry knowledge



Robust and strong **global** connectivity



Strong intellectual property laws



Ideal livina laboratory to test-bed new technological innovation

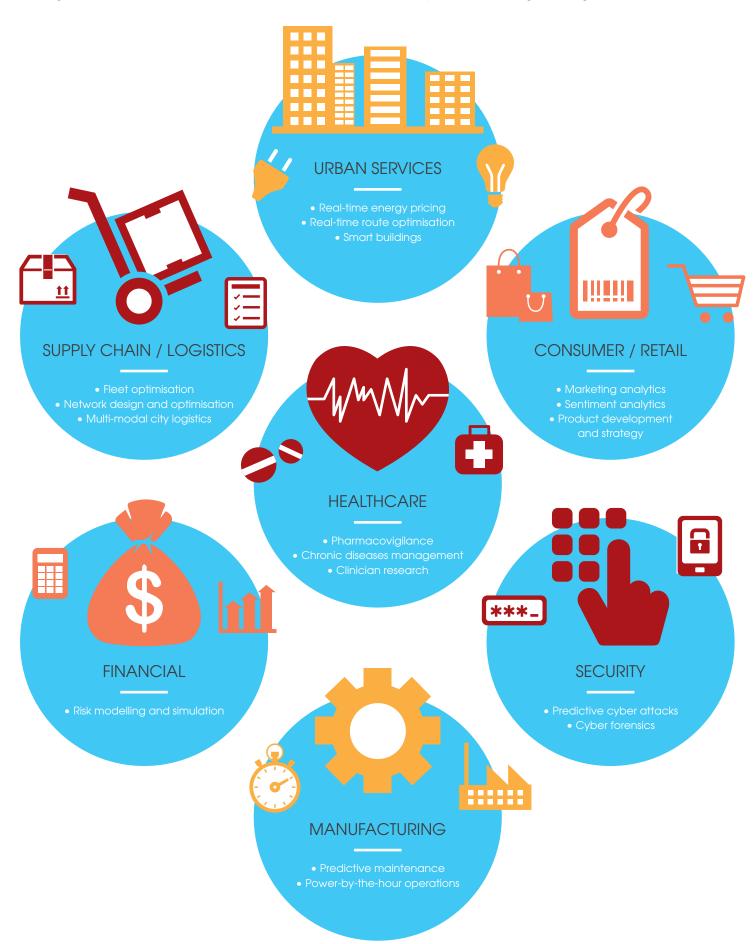
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OPPORTUNITIES IN SINGAPORE

In Singapore, we have identified seven areas where data analytics would bring about great transformations.



Today, Singapore already hosts many projects from these sectors and some of them are:

- Accenture Analytics Innovation Center (AAIC) will focus on developing innovative approaches for the use of
 analytics in services related to education, health, procurement, public safety, resource utilisation, smart grids,
 transportation and workforce effectiveness.
- EDF-Veolia Centre of Excellence for Sustainable Cities is in collaboration with Singaporean authorities in the following fields: energy-efficiency and air conditioning systems in buildings, domestic waste collection, the integration of solar panels into buildings, the development of green roofs, as well as local water recycling.
- NEC Laboratories Singapore (NLS) aims to produce solutions for urban issues by concentrating on areas that include safety, big data, security and smart energy.
- NielsenLAB is the first in Asia outside the US which develops and leverages cutting-edge technologies and methodologies in neuroscience, shopper technology and measurement science to fuel consumer and market insights for companies working to reach consumers in Asia.
- SAP Next Business and Technology Research Centre is the largest research location and headquarters in Asia
 Pacific focusing on research into social business networks and collaboration, real-time intelligence and
 analytics.

DATA ANALYTICS TALENT IN DEMAND

With the rise of big data, the need for analytics expertise and services is becoming more urgent. Experts who can make sense of large amounts of data and integrate that knowledge with their business expertise to solve the business challenges of the future are in great demand. Companies in Singapore are looking to hire experts in these three areas, in particular data scientists.



DATA SCIENTISTS

Model domain-specific problems by applying statistical and/or algorithmic techniques on data sets to derive insights.



DOMAIN EXPERTS

Define problem statements, identify relevant data and articulate metrics for analysis.



SOLUTION ARCHITECTS

Design underlying architecture and convert models into complete, scalable software for implementation.

DATA ANALYST



WORK EXPERIENCE:

0 to 5 years of data analytics experience



EDUCATION REQUIREMENTS:

Bachelors/Masters in statistics, computer science, math or related quantitative fields



DATA SCIENTIST



WORK EXPERIENCE:

At least 6 years of data analytics experience



EDUCATION REQUIREMENTS:

Masters/PhD in statistics, computer science, math or related quantitative fields





- Machine learning
- Statistical Modelling
- Operation Research
- Advance Calculus
- Management Science Techniques
- Inferential Statistics
- Natural Language Processing
- Knowledge Discovery & Data Mining
- Distributed & Parallel Computing
- Advance Computer Architecture

PROGRAMMING SKILLS AND DATA MANAGEMENT:

- Python
- MapReduce
- NoSQL
- SQL
- Hadoop
- R
- Hive/Pig
- Clojure
- Java



DOMAIN KNOWLEDGE AND SOFT SKILLS:

- Passionate about the industry and business
- Curious and inquisitive about data
- Able to persuade and influence decision makers
- Hacker mindset
- Innovative, problem solver and creative





- Knowledge of visualisation tools like Flare, HighCharts, AmCharts, D3.js, Google Visualization API, Tableau
- Story-telling skills
- Ability to engage with senior management, and translate data-drive insights into decisions

