

## **Fact Sheet - SMU-ALIBABA SERIES**

Disruption is the watchword for today's business leaders, who face the threat of changing consumer behaviour on one hand, and competition from agile, innovative startups on the other. The businesses that will win in this environment are those that are able to respond to these challenges swiftly and with agility.

Jointly presented by SMU Academy and Alibaba Cloud, the new *SMU-Alibaba Series* features courses that will focus on the latest trends and digital strategies in industries such as new retail, finance, logistics, manufacturing. The courses are designed to provide insights into applicable technologies and digital strategies across these sectors.

These courses will feature the use of emerging technologies such as cloud computing, artificial intelligence and blockchain, which can help transform business models into the smart business models. Participants will also gain knowledge about best practices and success stories of businesses which have transformed with digital strategies.

The following courses are the first 7 to be rolled out from March 2019 under the *SMU-Alibaba Series*:

---

### **COURSES**

#### **1. Big Data Analytics & its Applications in Business**

Regardless of what size of business you are running, you need valuable data and insights to help you understand your target audience and their preferences, so that you can anticipate their needs.

In today's world, properly leveraged data can give your business a competitive advantage. Companies now handle vast amounts of data on a daily basis and there is unparalleled demand for professionals in this space. Learn how to extract useful information from data and increase the ROI of a business by taking up this course.

##### **Learning Objectives:**

At the end of the 2-day course, participants will be able to:

- Gain an overview of business applications of big data and analytics techniques
- Gain real-world insights into various applications of big data analytics and how it can be used to fuel better decision-making within an organisation/ business
- Learn how big data and analytics techniques can create business value
- Understand how to manage big data and analytics projects and teams

##### **Who Should Attend:**

Business owners or working professionals looking to deploy big data solutions in their businesses.

##### **Prerequisites:**

-

**Duration:** 2 days.

---

#### **2. Essentials of Cloud Computing**

Cloud computing is becoming more and more important for businesses. The cloud, and the flexibility it provides, is fast becoming a necessity for innovative and daring organisations. Compared with traditional, pre-cloud conditions, cloud computing has conveyed efficiency that empower organisations to diminish capital expenses and increment business adaptability. For businesses, cloud computing offers a very cost effective solution and is perfect for smaller businesses without the resources or money to invest in secure systems in-house. It also offers many other benefits. Come join this course to find out how cloud computing can benefit your organisation or business.

**Learning Objectives:**

At the end of the 2-day course, participants will be able to:

- Gain an understanding of cloud computing service models, deployment models, architecture with cloud service providers and the business aspects of adapting cloud into organisation
- Understand the various reasons behind cloud application deployment considerations, cloud economics and ROI with case studies
- Acquire knowledge on virtualisation, identity management, cloud testing, cloud monitoring and management
- Understand cloud security and privacy issues
- Learn how to use a cloud platform and cloud services to build an enterprise application

**Who Should Attend:**

Working professionals looking to deploy cloud solutions in their organisations or businesses.

**Prerequisites:**

-

**Duration:** 2 days.

---

### 3. Internet of Things: Technology and Applications

The Internet of Things (IoT) is transforming our physical world into a dynamic system of connected devices on an unprecedented scale. Advances in technology are making possible a more widespread adoption of IoT, from pill-shaped micro-cameras that can pinpoint thousands of images within the body, to smart sensors that can assess crop conditions on a farm, to the smart home devices that are becoming increasingly popular. But what are the building blocks of IoT? And what are the underlying technologies that drive the IoT revolution?

In this 1-day course, our trainer from Alibaba Cloud will deliver an overview of exciting and relevant technical areas essential for anyone who wants to find out more about IoT.

**Learning Objectives:**

At the end of the 1-day course, participants will be able to:

- Explain what is Internet of Things (IoT) and understand how the general Internet as well as IoT work
- Understand how IoT devices interact together and with users
- Learn about the protocols used by IoT devices
- Discover the different platforms that are available to develop applications
- Learn about commercially available devices that are already using the IoT
- Understand constraints and opportunities of wireless and mobile networks for IoT
- Gain insights into the future of IoT

**Who Should Attend:**

Working professionals with an interest in IoT, those who wish to know the potential and intend to build a career in the field.

**Prerequisites:**

- Familiarity with basic programming and with Internet technologies (like TCP/IP & HTTP) is helpful
- Basic knowledge in electronics is helpful but not mandatory
- No prior knowledge about IoT is required

**Duration:** 1 day.

---

## 4. Smart Retail & Marketing

Over the past two decades, the retail industry endured more disruptive change than it experienced collectively in all its previous history. The Internet enabled an entirely new channel in online e-commerce, and smart Internet technologies informed and empowered consumers like never before, placing shoppers in an unprecedented position of power and authority.

Today, a new retailing era has begun - for the first time ever, shoppers are calling the shots.

Today's smart store operational technologies make shopping experiences all about shoppers, the way retail is *supposed* to be. Data coupled with the arts of design and merchandising drives product selections on the floor, with analytics applications optimising assortment planning and the like. To compete, retailers need to keep up in all areas from the store floor to customer behaviour to the back office. Come join our course and learn from our experts on how to put smart retail to work.

### Learning Objectives:

At the end of the 2-day course, participants will be able to:

- Learn how to integrate e-commerce with offline retail
- Understand how to leverage machine learning in sales forecasting and inventory optimisation
- Learn how to analyse traffic and conversions using big data
- Gain an overview of data-driven marketing methodology and learn how to build data-driven marketing capability
- Learn how to build a robust customer data foundation to get useful customer insights
- Understand how to operationalise data assets for generating significant business impact

### Who Should Attend:

Business leaders and senior managers from all business areas, who wish to gain insights into the new retail development and learn how some of these smart strategies and technology can be applied to their business.

### Prerequisites:

-

**Duration:** 2 days.

---

## 5. Smart Finance

The digital transformation that has upended industries from retail and media to transport and business-to-business commerce is now sweeping the financial services industry. Although financial services have been computerised for decades, with products such as retail brokerage using digital channels for some 20 years, a more radical transformation of the industry has been delayed till the recent years. This was inevitable, as ubiquitous computing power, pervasive connectivity, mass data storage, and advanced analytical tools can easily and efficiently be applied to financial services.

The new wave of smart finance is offering point solutions in product areas such as payments, remittances, savings and investments, personal financial management, trade and invoice finance, small and medium-sized enterprises (SMEs), lending, and insurance. Innovations are also directed at processes such as Anti-Money Laundering-Know Your Customer (AML-KYC) compliance, credit scoring, underwriting and risk management, customer service, collections and recovery, capital markets activities, asset securitisation, middle- and back-office reporting, trade processing, and connectivity between banking systems.

Come join this course and learn from our experts the challenges and opportunities smart finance presents, understand the technologies involved and how they can be integrated and customised to business' needs in order to reap their full advantage and see how you can create value and revenue from them.

**Learning Objectives:**

At the end of the 2-day course, participants will be able to:

- Learn about the development of finance and technology in recent history, major technological trends and stakeholders in the ecosystem
- Gain insights into how new technologies is reinventing financial services in the new ecosystem
- Learn about the concepts and functionality of these technologies and how they are being used to provide services, how they work and where the opportunities and challenges are
- Understand how companies/ financial service institutions can leverage into the future and select the right digitalisation strategy in order to increase their client outreach and deliver a wide range of financial services via new channels
- Learn how smart finance help financial service institutions respond to new regulations with agility, while ensuring that that the customer experience does not suffer

**Who Should Attend:**

Working professionals looking to deploy smart finance solutions in their businesses.

**Prerequisites:**

-

**Duration:** 2 days.

---

## 6. Smart Manufacturing

Alibaba's co-founder, Jack Ma, predicted that New (Smart) Manufacturing will bring swiping challenges and opportunities to manufacturing companies in China and around the world. In the future 10 to 15 years, all the pain points of the manufacturing industry will be far more serious than those for today and we should get prepared."

Similar to smart retail, smart manufacturing involves a transformation of traditional manufacturing industry by integrating technology capabilities in the internet, data, AI, cloud computing and IoT. The trend towards smart manufacturing and Industry 4.0 will change production significantly in the future. Therefore, it is imperative to understand basic principles of smart manufacturing and Industry 4.0 to meet the challenges facing production in the future.

On the one hand, this course seeks to address the current state of the art in smart manufacturing; and on the other, it provides an outlook on new technologies, businesses and opportunities arising out of digitalisation, use of smart devices. So, come join this course and learn more about smart manufacturing and how it's being implemented across a variety of industries.

**Learning Objectives:**

At the end of the 2-day course, participants will be able to:

- Understand the key components of smart manufacturing and the relevant methodology
- Gain an overview of industry-specific use cases of smart manufacturing
- Understand what types of data are required for real-time decisions and for future analysis. Examples of using sensor data for alerts, dashboards, analytics and machine learning will also be discussed
- Understand how to provide transparency to end customers by tracking order status at each step of a complex assembly process
- Discuss the impact of capital assets on a manufacturer's balance sheet and how digital asset management can improve asset utilisation

**Who Should Attend:**

- Business leaders and senior managers in manufacturing organisations
- Technology suppliers for manufacturing, warehousing and asset management

**Prerequisites:**

Familiarity with manufacturing and logistics processes and systems.

**Duration:** 2 days.

---

## 7. Smart Logistics

Having the right product at the right time at the right place and in the right condition – these are the well-known requirements for logistics and transportation in general. But fulfilling these requirements is getting more and more complex in a dynamically changing logistic environment. There is a shift from traditional supply chains to open supply networks. The highly dynamic logistic markets and the advancing complexity of logistic networks require new methods, products and services.

When a supply chain is agile and quick to move products from the start of the chain to the customer at the end, this brings about competitive advantage for the business. The business will be demand-driven and extremely market-responsive, stocking the warehouse quickly in a short period, and pushing products to fulfilment in just a few days or one or two weeks.

How can this be done? Various logistics solutions exist in the market, but how they speak to one another seamlessly for an effective and impactful outcome requires the creation of a Smart Logistics strategy – one that sets out how technologies can be integrated and customised to the business's needs. Join us for this course to find out more about how this can all be done from our experts.

### Learning Objectives:

At the end of the 2-day course, participants will be able to:

- Gain an overview of the global logistics landscape and take a closer look at some of the key disrupting factors: changing customer expectations, technological breakthroughs, new entrants to the industry, and new ways to compete or collaborate
- Understand the key components of smart logistics and how they can be integrated to generate business value
- Learn how flexible automation solutions has increased the agility and elasticity of the logistics infrastructure to cost effectively meet market fluctuations
- Understand how by anticipating the demand and studying the data-patterns, companies can predict the demand, plan and align the operations well in advance

### Who Should Attend:

Business leaders looking to deploy logistics solutions in their businesses.

### Prerequisites:

- Familiarity with logistics processes and systems
- Basic statistical knowledge
- Programming skill (R or Python)

**Duration:** 2 days.

---

## TRAINERS

**Dr Chuah Jun Wei** is currently Regional Manager (Smart City Solutions) at Alibaba Cloud, architecting novel IoT solutions for the future Smart City. These solutions leverage the capability of Alibaba Cloud's ET Brain Platform to enable verticals spanning city management, smart buildings, and healthcare. Jun Wei has over 10 years of experience in IoT, from embedded systems design to sensor networks, data analytics, and IoT solutions. He is especially interested in the seamless infusion of useful technologies into traditional industries, such as construction, facilities management, and manufacturing.

Prior to joining Alibaba Cloud, Jun Wei was separately Head of IoT and Data Science at Surbana Technologies (a subsidiary of Surbana Jurong Group), where he led a team of engineers and data scientists to support and enhance the Smart City in a Box platform and a researcher at the Agency for Science, Technology and Research (A\*STAR) where he managed a department of scientists and engineers at the Institute for Infocomm Research which specialises in energy research, focusing on energy storage, energy analytics, and green building technologies.

Jun Wei holds a doctorate in Electrical Engineering from Princeton University and a bachelor's degree in Electrical and Computer Engineering from Carnegie Mellon University.

---

**Sujukumar Kumaran** (Siju) is Director, Solution Consultant - Financial Services and Innovations at Alibaba Cloud. Siju works for global industry solution consulting group, focusing on enterprise customers in South East Asia region to transform their business through Alibaba Cloud.

Siju is an experienced digital transformation leader with more than 15 years of experience in solution architecture, consultancy and project delivery in financial services, helping financial services institutions strengthen business opportunities through strategic technology planning. He is an accomplished agile and lean professional with extensive experience in driving technology change through close client partnership and deep domain expertise.

In his previous role, Siju worked with Barclays Investment Bank for over 11 years, as VP of Technology, driving their Post Trade Services, closely collaborating with global business leaders. He had also worked with Thomson Reuters and Société Générale, a French investment bank, earlier in his career. Leveraging his core strengths in defining IT and data strategy and in driving architecture roadmaps, Siju has thus far helped to drive many multi-year enterprise transformation projects, which involves large data warehouses, real-time processing workflows and front-end interfaces.

---

**Yang Kan** is currently Regional Manager of Data Intelligence Business at Alibaba Cloud, leading Alibaba Cloud's regional big data and AI business strategy and solutions. His team is dedicated to craft solutions under ET Brain framework to various industries including smart city, new retail and smart manufacturing.

Prior to joining Alibaba, Yang Kan spent 10 years in managing enterprises' global big data strategies and programmes. He was responsible for transforming many traditional businesses into data-driven organisations in oil & gas, and manufacturing industries. He has successfully implemented multiple end-to-end data projects and rollout the solutions to global organisations.

---

**Dr Long Yin** joined Alibaba Group in 2018 where she started to embrace Alibaba Cloud platform and to apply big data and AI solutions on this platform for industry digital transformation. Her specialisation is in machine learning, mathematical optimisation and cloud computing.

Before joining the Alibaba Group, Long Yin had served as a senior data scientist at IBM and was recognised for her contributions towards the digital transformation journey of organisations in the finance, supply chain and maritime industry. She received her PhD in Operations Research from National University of Singapore and holds a number of patents and publications.

---

**Cao Yi** is Data Technology Consultant at Alibaba Cloud, helping enterprises in the region to embark on their digital transformation journey, by leveraging big data and cloud computing technology.

Cao Yi joined Alibaba Cloud with over 10 years of experience in big data consulting, helping clients drive business value by leveraging new technology. Prior to joining Alibaba, he spent several years with Pivotal and MapR helping fortunate 500 companies define their data strategy.

---

**Gavin Liu** is Solution Architect at Alibaba Cloud, helping customers design their infrastructure architecture in cloud and build their applications with elastic, secure components in cloud platform.

Gavin joined Alibaba Cloud with more than 10 years of experience in a variety of IT fields such as Server Load Balancing, Disaster Recovery Data Center design, Cloud Computing, Networking, Storage and Security, covering roles from global technical support, hands-on implementation to presales consultation and architecture design.

---

## **FUNDING**

### **SkillsFuture Series**

Course fee grant at 70% of course fees (excluding GST) for participants who are successfully enrolled by SMU into approved courses under the Programme. Participants must be Singapore Citizens or Singapore Permanent Residents.

### **SkillsFuture Mid-Career Enhanced Subsidy ("MCES")**

Up to 90% of course fees for Singapore Citizens aged 40 years and above.

### **Enhanced Training Support for SMEs ("ETSS")**

Up to 90% of course fees for employees of SMEs who are Singapore Citizens or Permanent Residents.

### **Workfare Training Support Scheme ("WTS")**

Up to 95% of course fees for Singapore Citizens aged 35 years and above (13 years and above for persons with disabilities) earning a monthly income of not more than S\$2,000.

### **SkillsFuture Credit**

Singapore Citizens aged 25 and above, and self-funding may use their SkillsFuture Credit (up to S\$500) to defray part of the course fee. Please click **User Guide** on how to submit your claim. SkillsFuture Credit claims may be submitted by logging in via **MySkillsFuture.sg**.

### **Absentee Payroll**

Companies who sponsor their employees for the course may apply for Absentee Payroll via the SkillsConnect system. For more information, please visit **SkillsConnect**.

---

## COURSE FEE

All fees quoted are inclusive of GST.

Course Title	Full Fee	For Singapore Citizens/ Singapore Permanent Residents, fee payable after 70% SSG Funding & 20% SkillsFuture Mid-Career Enhanced Subsidy	For Singapore Citizens aged 40 and above, fee payable after 70% SSG Funding and 20% SkillsFuture Mid-Career Enhanced Subsidy	For Singapore Citizens aged 35 and above (13 years and above for persons with disabilities) earning a monthly income of not more than S\$2,000, fee payable after 70% SSG Funding and 25% Workfare Training Support Scheme	For SMEs supporting their employees who are Singapore Citizens/ Singapore Permanent Residents, fee payable after 70% SSG Funding and 20% Enhanced Training Support for SMEs
Big Data Analytics & its Applications in Business	S\$2,140	S\$642	S\$242	S\$142	S\$242
Essentials of Cloud Computing	S\$2,140	S\$642	S\$242	S\$142	S\$242
Internet of Things: Technology & Applications	S\$856	S\$256.80	S\$96.80	S\$56.80	S\$96.80
Smart Retail & Marketing	S\$2,140	S\$642	S\$242	S\$142	S\$242
Smart Finance	S\$2,140	S\$642	S\$242	S\$142	S\$242
Smart Manufacturing	S\$2,140	S\$642	S\$242	S\$142	S\$242
Smart Logistics	S\$2,140	S\$642	S\$242	S\$142	S\$242