# BIZ AMALYTICS

#### JULY 2019 QUARTERLY NEWSLETTER

## WHAT WE DO

Business analytics. Two very simple words but when put together can be a great source of confusion and misunderstanding for those outside of the field. Even on job portals some fail to define the term correctly. Business analytics (BA) refers to the use of data mining to **identify trends and patterns** to enable decision makers to **make better decisions**.

In our programme, we are trained in the application of a broad array of analytics techniques such as visualisation, web mining, text mining, statistics, machine learning, forecasting and optimisation using analytics software so that we can apply them in a **broad spectrum of organisations and sectors**, including government, healthcare and medicine, community, business, social services – essentially any organisation with a lot of data that require analytics insights.



The business-related courses such as marketing, accountancy, finance, economics and law equip us with a good understanding of the different aspects of business. These courses complement the data mining skills that we learn in the programme. We are exposed to various techniques of data mining, with an emphasis on how these techniques can be applied in all industries. Equipped with fundamental business domain knowledge and relevant analytics skills, we will be able to engage in a spectrum of professional activities necessary to **harness the value of data** to support decision making in organisations.

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When I was asked to write a few words for your first newsletter, I wanted to write something useful and not to sound too naggy. Honestly this is challenging for someone like me. Anyway, the following is what I ended up writing.

For my Year-1 students: Ask your seniors to share their stories in SUSS---both the good and the bad.

For my Year-2 students: Start thinking about what minor you want to take. If you don't quite know what you want, all the more you have to start thinking.

For my Year-3 students: Find something you love for your work attachment and do it well; if something you love turns out to be something you hate, do it well too!

Most importantly, enjoy your every moment in SUSS and *Carpe Diem*! James

> Dr James Tan (Head of BA Programme)

### UPCOMING EVENTS

BA Kopi Chat

September 2019

SUSS Live Visualisation Challenge

12th September 2019

AWWA Charity Drive

September 2019

## HOW DO WE DIFFER

DEGREE AND FACULTY	KEY DIFFERENCES
Business Analytics degrees offered by <b>Computing</b> Science and Engineering faculties	Very heavy focus on <b>computing</b> and <b>programming</b> . Pedagogy typically covers computer science, mathematical sciences (calculus and statistics) and applications in technology and business.
Data Science and Analytics degrees offered by <b>Science</b> (including Mathematics and Statistics) and <b>Economics</b> faculties	Inclination towards the <b>statistical</b> and <b>mathematical</b> analysis of data. Pedagogy tends to cover both statistics and computer science, as well as statistical software applications (such as R programming) and big data analysis.
Business Degrees with Specialisation in analytics offered by <b>Business</b> Faculties	Focus on the <b>applications of data mining</b> in the various business areas. The courses in the initial years of study comprise diversified business-related modules complementary to business analytics.
Business Analytics degrees under <b>Business</b> faculties (e.g., SUSS Business Analytics programme in the School of Business)	Emphasis on business analytics supported by <b>diverse, generic business</b> <b>courses</b> in the first two years of study.

## WHAT OUR STUDENTS SAY

A month into my internship at the CPF Board, I managed to contribute my knowledge on Tableau, by building a guide for the staff at the Board. This enabled the users who had never used Tableau before to better understand the basics on how to navigate in and use Tableau.

To perform analytics tasks, there needed to be a business problem at hand. The *Cross-Industry Standard Process for Data Mining* (CRISP-DM) framework we picked up in SUSS, is one thing that I practise a lot when performing analytics tasks. Often, this would mean understanding the business problem and the underlying business objective at



hand, in order to perform data analysis. This could mean understanding the internal business problems, such as who has access to certain software in order to track authorisation. Dashboards could be built to allow top management to better visualise the authorisation across departments.

- LOW AI SHAN (class of 2021)

Data is what you need to do analytics. Information is what you need to do *business*.

~ John Owen