BIZ ANALYTICS

SUSS SINGAPORE UNIVERSITY OF SOCIAL SCIENCES

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In the modern era, business analytics has rapidly gained traction to become one of the world's fastest growing industries. "Analytics" form a huge part in business analytics, where the science of manipulating data comes into play to help businesses gather insights. Manipulating data might sound intimidating and foreign when stepping into the business analytics industry and we totally understand that.

The theme for this newsletter issue is "From Data Disaster to Certified Master". First, we aim to help all aspiring business analysts start their data journey by providing some useful resources, references and even free certifications. Next, we highlight the tools that will come in handy for any business analyst (R, Python, Tableau, SQL). Lastly, there are tips on how we can continue to improve and upgrade ourselves to remain competitive.

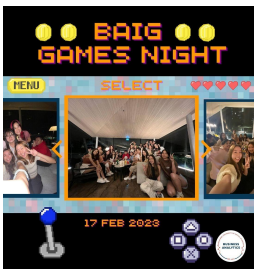
From Data Disaster to Certified Master

Half Year Recap 2023

Useful resources, references and certifications for business analysts

Thriving in the Data-Driven Age

Before we begin, let us take a moment to recap on the events that have been held over the last six months. In the past months, the Business Analytics Interest Group (BAIG) has consistently organised multiple events to engage its members and the Business Analytics (BSBA) community. The events organised range widely from leisurely activities to professional industry talks. To highlight some of these significant events, BAIG hosted Game Nights, Welfare Pack and Merchandise Sales Day, Networking Day (Laser tag edition), Github workshop, NielsenIQ industry talk and the Amplifyme (Finance Accelerator Simulation) workshop. These events provided a balanced opportunity for the BSBA community to have fun, network and gain new skills. Events such as the Networking Day (Laser tag edition) enabled the BSBA community to network and have fun whilst the NielsenIQ industry talk provided aspiring data analysts with insights into NielsenIQ and the impact of AI. To keep up with and find out more about the events BAIG organises, check out our instagram account: suss_baig and LinkedIn account: SUSS Business Analytics Interest Group (BAIG).



Games Night

GitHub Workshop

Official Accounts:

Instagram: Suss_baig

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Photo Gallery

AI SG Beginner Workshop

BAIG Onboarding Day

GitHub Workshop

Networking Day

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Useful resources, references and certifications for business analysts

What are some useful resources, references and certifications for business analysts?

In today's rapidly evolving business landscape, the role of a business analyst has become increasingly crucial. As a bridge between stakeholders and technology teams, business analysts play a pivotal role in driving organisational growth and innovation. Whether you are a beginner or a seasoned professional seeking to expand your skill set, the availability of free resources and certifications can provide a significant boost to your career. This article aims to explore a plethora of invaluable free resources and certifications that can empower business analyst students to excel in their chosen field.

Taking online courses in business analytics can be highly beneficial in today's data-driven world. It provides individuals with the necessary skills and knowledge to analyse and interpret complex data sets, make data-driven decisions, and gain a competitive edge in the business world.

In this article, we separate the courses and resources between beginners and experienced business analysts.

Most data analytics, data science, and coding courses miss a critical practical step. They seldom teach you how to work with raw data, how to clean, and preprocess it. This creates a sizable gap between the skills you need on the job and the abilities you have acquired in training. Truth be told, real-world data is messy, so you need to know how to overcome this obstacle to become an independent data professional.

The bootcamps we have seen online and even live classes neglect this aspect and show you how to work with ‘clean’ data. But this is not doing you a favour. In reality, it will set you back both when you are applying for jobs, and when you are on the job.

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For Beginner Business Analysts

Some key skills to take up as a beginner business analyst would be to learn Basic Python, NumPy, Pandas, Working with text files, Data collection, Data cleaning, Data preprocessing, Data visualisation. These skills will help in analysing data - becoming an effective business analyst.

The good news is that a lot of good and effective courses are available online and they are accessible for free. An example would be Udemy.com; they offer multiple Data Analytics and Business Analytics courses. These courses range from 20 to 50 hours per course. Beginner business analysts are recommended to take up these courses to broaden their knowledge on basic data analytics and learn foundational skills such as Python and Data cleaning. A tip for Singaporeans and PR is to register for a NLB account to gain access to a paid Udemy.com account.

In addition, websites like Business Analyst Learnings and Bridging the Gap provide a wealth of articles, blogs, and templates that offer valuable insights into the industry's best practices. These resources are especially beneficial for students looking to familiarise themselves with business analysis terminologies, methodologies, and frameworks.

For Experienced Business Analysts

For business analysts with some experience under their belt, acquiring certifications can serve as a stepping stone to career advancement and increased marketability. One prominent certification that is highly regarded in the industry is the International Institute of Business Analysis (IIBA) certifications. The IIBA offers certifications such as Entry Certificate in Business Analysis (ECBA), Certification of Capability in Business Analysis (CCBA), and Certified Business Analysis Professional (CBAP). These certifications validate an individual's proficiency in key business analysis competencies and are recognised globally.

Moreover, professionals looking to specialise in agile methodologies can explore the Agile Business Analyst (AgileBA) certification. This certification focuses on agile principles, techniques, and practices that are particularly relevant in today's dynamic business environment. The AgileBA certification equips business analysts with the skills to effectively collaborate with agile development teams and deliver value-driven solutions. Elaborating further, Agile is a project management approach that involves breaking the project into phases and emphasises continuous collaboration and improvement. Teams follow a cycle of planning, executing, and evaluating. Many teams in top firms and companies such as banks and tech firms utilise the Agile methodology to approach projects.

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In conclusion, the business analyst field offers a wide array of free resources and certifications that cater to the needs of both beginners and experienced professionals. Leveraging these resources can help aspiring business analysts gain a solid understanding of the foundational principles, while certifications provide a means to showcase expertise and enhance career prospects. By taking advantage of these opportunities, students can continuously grow and adapt to the ever-changing demands of the business world, ensuring their success as skilled business analysts. So, embrace the abundance of free resources and certifications, and embark on a journey of continuous learning and professional growth.

Useful Sites:

1. International Institute of Business Analysis
   https://www.iiba.org/
2. APMG International
   https://apmg-international.com/product/agile-business-analyst-agileba

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Thriving in the Data-Driven Age

In today's rapidly evolving digital landscape, the ability to harness the power of data has become a critical skill set for professionals across diverse industries. Being data-driven is no longer just an advantage; it is a necessity in order to remain competitive and excel in the age of data. As students at SUSS University, where Business Analytics takes centre stage, it is imperative to recognise the importance of being data-driven and continually upgrading ourselves to navigate this data-rich era.

Embracing a data-driven approach offers several undeniable benefits, ranging from enhanced decision-making to improved performance and efficiency, as well as a customer-centric approach.

First and foremost, being data-driven enhances decision-making processes. By basing strategies on real insights derived from data, rather than relying solely on intuition or experience, organisations can make more accurate and informed decisions. For instance, Netflix, the popular streaming platform, leverages user data to personalise recommendations. This data-driven approach not only improves user satisfaction but also increases engagement and retention rates.

Moreover, a data-driven approach fosters improved performance and efficiency within organisations. By analysing data, businesses can identify areas for optimisation within their operations. Logistics companies like UPS, for example, utilise data analytics to optimise delivery routes, reducing fuel consumption and improving overall efficiency. By leveraging data, organisations can streamline processes, reduce costs, and enhance productivity, ultimately driving superior performance.

A data-driven approach also emphasises a customer-centric focus. Understanding customer needs and preferences is essential for success in today's market. Data-driven insights help businesses tailor their offerings to meet customer demands. Amazon, the e-commerce giant, is a prime example of how data analysis can transform the customer experience. By analysing customer data, Amazon provides personalised product recommendations, creating a seamless and tailored shopping journey.

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Competitive Advantage

Value-add to Organisations

Effectively Manipulate & Analyse Data

Furthermore, embracing a data-driven approach provides a clear competitive advantage. Organisations that leverage data can anticipate market trends, identify emerging opportunities, and stay ahead of the competition. Consider Airbnb, the home-sharing platform, which utilises data analytics to understand pricing dynamics. By leveraging data, Airbnb ensures competitive rates for hosts and guests, securing its position as a market leader. To continually upgrade ourselves and remain competitive in the age of data, several strategies are worth considering.

Firstly, developing data literacy is crucial. Building a strong foundation in data literacy involves understanding key concepts and methodologies. This includes familiarising oneself with data types, collection methods, analysis techniques, and data visualisation. By developing data literacy, individuals can effectively interpret and communicate insights derived from data, ensuring their value within organisations.

Acquiring technical skills is equally important. Proficiency in data analytics tools, programming languages (such as Python, R, and SQL), and statistical analysis techniques enable professionals to manipulate and analyse data effectively. These technical skills empower individuals to extract valuable insights and drive data-based decision-making, setting them apart in the competitive job market.

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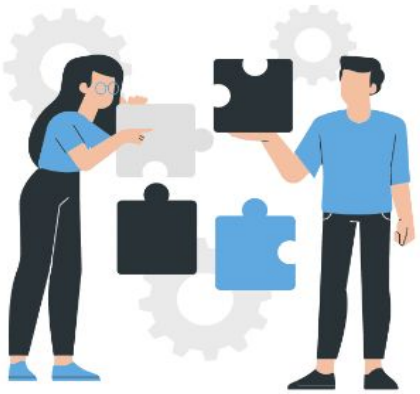
Staying updated with industry trends is essential in the dynamic field of data analytics. The landscape is continuously evolving, with new technologies, methodologies, and best practices emerging regularly. Engaging in industry forums, attending conferences, and following thought leaders allow individuals to stay informed, adapt to changes, and gain a competitive edge.

Stay Updated with Trends

Gaining practical experience is invaluable in honing skills and applying theoretical knowledge to real-life situations. This can be established through hack-a-thons, data analytics internships and online courses (refer to Article 2) can provide hands-on experience with data analysis and decision-making processes. Practical experience not only solidifies theoretical understanding but also demonstrates competence to potential employers.

Practical Experience

Collaboration and networking are also key components of thriving in the data-driven age. Engaging with peers, mentors, and industry professionals allows for knowledge sharing, exchange of ideas, and learning from others' experiences. Joining professional organisations or online communities dedicated to data analytics provides opportunities to collaborate, seek guidance, and stay connected with the latest trends and opportunities in the field. All of the events hosted by BAIG ensure that all BA students who are keen to learn, collaborate and network are given the opportunity to do so.



Collaboration & Network

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Mindset of Continuous Learning

Lastly, developing a mindset of continuous learning is vital. The field of data analytics is rapidly evolving, and technologies and methodologies that are relevant today may become obsolete in the near future. Embracing a growth mindset and actively seeking new learning opportunities, such as online courses, workshops, or certifications, ensures professionals to remain up-to-date and adaptable in the face of evolving data challenges.

In conclusion, the data-driven age presents both challenges and opportunities to professionals. Embracing a data-driven approach offers benefits such as improved decision-making, enhanced performance and efficiency, and a customer-centric focus. To thrive in this era, individuals must develop data literacy, acquire technical skills, stay updated with industry trends, gain practical experience, foster collaboration and networking, and embrace a mindset of continuous learning. By doing so, professionals can transform from victims of data disasters to certified masters, equipped to navigate and excel in the data-rich landscape of today and tomorrow.

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Mini Python Challenge

Given 2 strings, a and b, return the number of the positions where they contain the same substrings with the same length.

Example:

For strings “xxcaazz” and “xxbaaz”, it yields 3. Since the “xx”, “aa”, and “az” substrings appear in the same place in both strings.

```
string _match(‘xxcaazz’, ‘xxbaaz’) -> 3
string _match(‘abc’, ‘abc’) -> 2
string _match(‘abc’, ‘axc’) -> 0
```

Note:

Look out for the solutions in the next issue!

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Solution to Mini Python Challenge (March 2023 Issue)

```python
def sum_odd_and_even(lst):
    sum_even=0
    sum_odd=0
    result=[]
    for i in lst:
        if i%2==0:
            sum_even=sum_even+i
        else:
            sum_odd=sum_odd+i
    result.append(sum_even)
    result.append(sum_odd)
    return result
```