The South Indian Association's
The S.I.A. College of Higher Education
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Report

Date: 26th February, 2022

On 26th February, 2022 we had two esteemed keynote speakers for MPulse 2022 – **Mr. Vijay Halpeth and C.A. Mrs. Jainithri Sathianathan.** A total of 163 students attended the session. The event was also broadcasted online through Microsoft Live. The total attendance in the online session was ____93___.

The first speaker for the day was Mr. Vijay Halpeth. He is a Gold Medallist in Electronics and Telecommunications engineering with post-graduation in Automation and Control Engineering from IIT Chennai. He worked as electronics engineer on board merchant ships and was posted in Italy, China and Japan for management of new ships. Currently, Mr. Halpeth is the Global Supply Chain Manager for Bernhard Schulte Ship Management, Hamburg. He is also a functional consultant for maintenance systems, procurement and supply chain management, and project management for clients in Europe and North America.

Summary:

Mr. Vijay Halpeth Sir spoke on the theoretical background of Data Science and explained the important concepts in Big Data. He began by stating the application of data driven insights for a commercial organisation or an educational institution. Sir noted that the amount of data generated every day in the internet is astounding. To put into perspective, anything ever written by mankind in any human language would comprise only 50 petabytes of data. In comparison, Google processes 20 petabytes of data every day. Sir explained the various nomenclature used for expressing the quantity of data such as, Petabyte, Zetabyte, Hexabyte, Yotabyte

and Brontobyte (As far as Brontobyte is concerned, nothing exists today that can be measured on this scale).

He observed that the capacity of even a simple laptop and mobile has grown exponentially. At the same time the cost of having the data storage in personal systems have come down and efficiency has increased. This has helped small businesses and even individuals to generate and store a vast amount of data and take decisions based on data driven insights.

He further elaborated about different forms of data. Data can be social media, transactional data or banking or airplane information. Data science and analytics make possible applications like Google Map, Comparative Prices in Amazon, Google search algorithm, Facebook metrics etc. Seeking to explain the omnipresence of data in the modern world, he explained that 72000 hours of data is generated every minute in You Tube and, in a minute, Google processes 20 lakh queries. A flight data recorder in a jet engine generates about 10 Terabyte of data for a 30-minute voyage. Large set of structured, semi structured and unstructured data are continuously generated at a very high speed. Such humougous quantities of data is stored in huge data servers and cloud.

He explained that Big data is simply a term used to refer to a collection of data that is huge and keeps growing exponentially in time. The four Vs of Big data are:

Volume – Storing data on a single machine is impossible due to larger size of data.

Variety – Transactional, search, social media.

Velocity: Fast – speed—bandwidth.

V – Veracity – How accurate that data is so that it becomes useful for deriving good insights.

Later he, elaborated on the various careers available in the field of data science. Data science, he noted is a multi-disciplinary field – focused on finding actionable intelligence from large sets of raw or structured data. Data Analysis on the other hand is processing and performing statistical analysis of existing datasets. Based

on their core competency and interests, students can select a particular career path in the field of Big Data.

The second speaker for the day was C.A Mrs. Jainithri Sathianathan Ma'am. She is a Chartered Accountant with an experience of 19 years in the various fields of technology, Management Consulting, Process excellence and Business Intelligence solutions. She is a practicing Chartered Accountant and also completed her masters in data analytics from Great Lakes University.

She spoke on application of Big Data and how being proficient in Big Data can help one to grow in their respective careers. She explained the data application with an example. The goal of a marketing executive is reach customers and reach the right set of customers. When people use Instagram, Facebook or any social media apps, unstructured data gets generated. This data can then be cultivated by businesses to push their products to targeted consumers.

Stressing on the utility of data analysis, she noted that companies that integrate data with business like Google, Facebook, Netflix, Amazon are able to perform infinitely better than traditional organisations and even surpass them whether in the field of news, media, retail, advertising or communication. Big Data and algorithm helped these new organisations to grow with vertical integration and collaborations by creating a platform through which creators and medium scale businesses could flourish.

Ma'am stated that the famous FAANG (Facebook, Amazon, Apple, Netflix and Google) companies focus on higher level of consumer experience that results in higher amount of trust from customers. Consumer and distributor data helps these organisations in marketing better, understanding what works and what doesn't and providing better consumer experience. She noted that Big Data is going to affect all subjects, disciplines and business sectors. Even healthcare has also benefitted by Big Data. Government and Public Sector is also not much behind in using big data to plan welfare schemes. Ma'am, also explained the use of data analytics in sports from helping bidders make IPL auction decisions to devising match strategies.

Stressing on how Data Science is important for business students, Ma'am explained how the three pillars of business - customers, employees and finance can benefit from data driven decision making. While the traditional disciplines give one a steady knowledge to understand the problem in business, Data analytics helps the person to devise the most effective solution to the problem.

Elaborating on the role of data in marketing, Ma'am explained that digital marketing supported by analytics enables the businesses to understand customers better and thus segment them in a better manner. Data is harvested through the social media behaviour and profile of the users. Similarly useful data can be cultivated through the surfing behaviour of the users. This data thus can be used to create structured information that can lead to actionable insights through Data analytics. This puts a severe limitation on those businesses that would choose to ignore the utility of Big Data.

She left the audience with a lot of keywords that she hoped the students would go and read about after the session and get further informed namely Market Basket analytics, Churn rate analysis, sentimental analysis. Similarly, Ma'am noted that data analytics can help in making HR and Finance decisions. Towards the end of her sessions, Ma'am explained the career path in Data science field starting from Data analysts to data engineers, business analysts, Statisticians and data scientists.

Some of the platform tools for descriptive visualisation are Tableu, PowerVI, etc. She implored the students to download the free versions of these softwares and practice in them. Further she observed that it is better to be a generalist in this area instead of going for specialisation. Also, one can go for internship programs and assess whether he/she has the aptitude and interest for data science.

In the end, the **President of The South Indian Association, Mr. Ranganathan Sir** who was present during the session shared his views on the importance of data. Sir observed that in today's world, data is gold. It is applicable to all businesses and has high utility in every field. He praised the speakers and remarked that there were a lot of new things that he learnt in the session. He further observed that the important knowledge shared by the speakers will prove useful to the students.