BIG DATA ANALYTICS

ABOUT THE PROGRAMME

Big data analytics examines large amounts of data to uncover hidden patterns, correlations and other insights. With today's technology, it's possible to analyze your data and get answers from it almost immediately – an effort that's slower and less efficient with more traditional business intelligence solutions.

EVOLUTION (BDA)

The concept of big data has been around for years; most organizations now understand that if they capture all the data that streams into their businesses, they can apply analytics and get significant value from it. But even in the 1950s, decades before anyone uttered the term "big data," businesses were using basic analytics (essentially numbers in a spreadsheet that were manually examined) to uncover insights and trends.

The new benefits that big data analytics brings to the table, however, are speed and efficiency. Whereas a few years ago a business would have gathered information, run analytics and unearthed information that could be used for future decisions, today that business can identify insights for immediate decisions. The ability to work faster – and stay agile – gives organizations a competitive edge they didn't have before.

SYLLABUS FOR MBA (BDA)

Syllabus & Key Concepts:
Introduction • Big Data Overview • What is data sciences • The rising and importance of data sciences • Big data analytics in industry verticals • Data Analytics Lifecycle and methodology • Business Understanding • Data Understanding • Data Preparation • Modeling • Evaluation • Communicating results • Deployment Data exploration & preprocessing • Measures and evaluation • Data Analytics: Theory & Methods • Supervised learning • Linear/Logistic

regression • Decision trees • Naïve Bayes • Unsupervised learning • K-means clustering • Association rules • Unstructured Data Analytics • Technologies & tools • Text mining, Web mining The Endgame • Opertionalizing an Analytics project • Data Visualization Techniques • Creating final deliverables

STATISTICAL ANALYSIS OF JOBS / INVESTMENTS / MARKET SIZES (BDA)

- Manufacturing
- Life Sciences
- Banking
- Health Care
- Government
- Retail

BEST JOB ROLES & SALARY QUOTIENT IN MBA (BDA)

➢ Data Scientist	$ 82,000/year
➢ Data engineer	$77,000/year
➢ Data scientist	$ 82,000/year
➢ Senior manager business analytics	$ 106,000/year
➢ Data analyst	$55,000/year
➢ Analytics Manager	$92,000/year
➢ Data Architect	$103,000/year
➢ Application Developer	$86,456/year
➢ Network architect/ designer	$96,748/year
➢ Satcomm `	$ 88,000/year

Ref.: https://www.payscale.com/research/SG/Skill=Big_Data_Analytics/Salary/Page-1

SALARY QUOTIENT IN INDIA- MBA (BDA)

Average salaries in India ₹ 5,00,000 – ₹ 8,00,000/Year.

- New Delhi: ₹ 3,00,000 – 4,00,000/year.
- Bengaluru: ₹ 4,00,000 – 5,00,000/year.
- Noida: ₹ 6,00,000 – 10,00,000/year.
- Hyderabad: ₹ 5,00,000 – 10,00,000/year.

TOP COMPANIES HIRING MBA (BDA)

KEY TECHNOLOGIES INVOLVED- MBA (BDA)

There's no single technology that encompasses big data analytics. Of course, there'sadvanced analytics that can be applied to big data, but in reality several types of technology work together to help you get the most value from your information. Here are the biggest players:

Machine Learning. Machine learning, a specific subset of AI that trains a machine how to learn, makes it possible to quickly and automatically produce models that can analyze bigger, more complex data and deliver faster, more accurate results – even on a very large scale. And by building precise models, an organization has a better chance of identifying profitable opportunities – or avoiding unknown risks.

Data management. Data needs to be high quality and well-governed before it can be reliably analyzed. With data constantly flowing in and out of an organization, it's important to establish repeatable processes to build and maintain standards for data quality. Once data is reliable, organizations should establish a master data management program that gets the entire enterprise on the same page.

Data mining. Data mining technology helps you examine large amounts of data to discover patterns in the data – and this information can be used for further analysis to help answer complex business questions. With data mining software, you can sift through all the chaotic and repetitive noise in data, pinpoint what's relevant, use that information to assess likely outcomes, and then accelerate the pace of making informed decisions.

Hadoop. This open source software framework can store large amounts of data and run applications on clusters of commodity hardware. It has become a key technology to doing business due to the constant increase of data volumes and varieties, and its distributed computing model processes big data fast. An additional benefit is that Hadoop's open source framework is free and uses commodity hardware to store large quantities of data.

In-memory analytics. By analyzing data from system memory (instead of from your hard disk drive), you can derive immediate insights from your data and act on them quickly. This technology is able to remove data prep and analytical processing latencies to test new scenarios and create models; it's not only an easy way for organizations to stay agile and make better business decisions, it also enables them to run iterative and interactive analytics scenarios.

Predictive analytics. Predictive analytics technology uses data, statistical algorithms and machine-learning techniques to identify the likelihood of future outcomes based on historical data. It's all about providing a best assessment on what will happen in the future, so organizations can feel more confident that they're making the best possible business decision. Some of the most common applications of predictive analytics include fraud detection, risk, operations and marketing.

Text mining. With text mining technology, you can analyze text data from the web, comment fields, books and other text-based sources to uncover insights you hadn't noticed before. Text mining uses machine learning or natural language processing technology to comb through

documents – emails, blogs, Twitter feeds, surveys, competitive intelligence and more – to help you analyze large amounts of information and discover new topics and term relationships.