



ST. JOSEPH'S COLLEGE OF COMMERCE (AUTONOMOUS)

Affiliated to Bengaluru City University

Accredited with A++ Grade by NAAC (4th Cycle) College with Potential for Excellence
(CPE) Ranked 74th in NIRF 2021 by Ministry of Education, Government of India #163,
Brigade Road, Bengaluru - 560025, Karnataka, India



Analytics Beacon

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**AN INITIATIVE BY
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[ANALYTICS]**

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The B.Com (Analytics) Programme develops individuals who can pursue career in the area of Analytics and continue their professional development by specialising in different domains related to Analytics, who can apply Analytics tools and techniques to solve business analytics problems. The programme is accredited by the Institute of Analytics, UK. The degree focuses on the conceptual knowledge in the multiple disciplines of analytics. The college intends to imbibe value based education to the students that will help them to function effectively in their business analytics career. Analytics is the practice of iterative, methodical exploration of an organisation's data, with an emphasis on statistical analysis. Analytics is used by companies committed to datadriven decision-making.





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“All I want for Christmas is you, Big Data Analytics!”

Every company has data. However, whether it is used to generate business value is another matter. Technical analysts have traditionally made decisions concerning data technology without fully understanding the business constraints, resulting in 'use cases' being retrofitted to demonstrate return on investment. Organizations are increasingly required to align both business and technical stakeholders in order to guarantee that business concerns are transformed into the appropriate technical solution from the start.

Let us take the example of Mr. Claus at the North Pole to demonstrate this. Mr. Claus' company, 'Christmas Inc.,' is the world's largest toy manufacturer and distributor. Every year, Mr. Claus is tasked with delivering gifts to 700 million children all across the world in one night; a duty that is not without its difficulties. Mr Claus would like to begin analysing datasets collected from the grotto in order to optimise his ecology, in order to make his life (and the lives of his elves) easier. Rather than investing in a large-scale technological platform such as Hadoop, Mr Claus wants to make sure that the 'data insight' he receives addresses all of his business problems. The technology the technical elves set up in the workshop will ultimately be dictated by those commercial challenges.



Mr Claus' business challenges

So, what are Mr Claus' business challenges? They range from HR to supply chain logistics, to customer profiling and demand forecasting. By asking questions in the right way, the technical elves will be able to translate the business question into an appropriate technical solution and subsequently define the relevant business processes. Mr Claus draws upon a data scientist, from Mango, to facilitate this discussion between business and technical elves.

1. What are the current stock levels of each manufactured toy that I make?
2. What is my elf productivity levels today?
3. How many children have sent me letters this year?
4. How many requests for each toy have I had to date?

Descriptive Analytics

The above are examples of business challenges that require a descriptive analytics approach – they aim to answer questions which describe 'moments' in historical datasets, e.g., total number, average value or spread of data. This information can simply be presented using a combination of Excel spreadsheets and graphical dashboards.

Mr Claus also wants to know the reasons why certain historical events happened. For example:

1. Why has there been a surge in requests for star-wars toys this year?
2. What has caused elf productivity to drop by 25% this year compared to last year?
3. Why did it take me 50% longer to deliver presents in 2014 than it did in 2013?



Diagnostic Analytics

Those are example of diagnostic analytic use cases. They look to answer the question ‘why did something happen?’ so steps can be taken to improve or avoid a situation in the future. These types of analytics are usually presented in a graphical dashboard format.

But Mr Claus doesn't only want to make conclusions in hindsight about historical data – he wants to be able to analyse trends in historical data to predict certain things about the future; foresight which will allow a more personalised experience for children but also allow Christmas Inc to remain competitive against other large toymakers. For example, Mr Claus wants to solve the following challenges:

1. What gifts are children likely to put on their Christmas lists if they also write down chocolate?
2. What factors determine whether someone gets put on the naughty list?
3. What influences an elf to work longer hours than usual?
4. Which route around the world am I least likely to come across storms?
5. Is there a link between toy trends and geographic location?



Prescriptive Analytics

The above type of questions requires a predictive analytics approach. Technical analysts are required to fit models to datasets to identify “rules of thumb” or relationships between different variables. Once a model has been identified, different variables can be tested against the model to determine the influence of variables on that particular model in question. The result of such analytics is usually a forecast report. Mr Claus also wants to know what he should be doing to optimise production from start to finish, given existing production constraints.

1. Given I only have 24 hours to deliver all my gifts, what is the optimum route to take around the world?
2. What is the most efficient way of producing gifts, ensuring seamless collaboration across the grotto ecosystem, given the machinery I have?
3. How can I minimise the production of waste in the workshop, given the existing processes?

Conclusion



By harnessing data analytics in the ways illustrated above, you can drive huge value in organisation. By reducing complex data sets to actionable intelligence, you can ensure more accurate and relevant business decisions are made. Data Scientists can help you do this.

Specialising in data analytics using the R programming language , they draw upon a wealth of industry expertise and diverse team skill-sets to offer bespoke data solutions to global business communities. It helped meet requirements at each stage of the data optimisation journey – from use case definition, to infrastructure development to advanced analytics. It aims to be flexible in our approach to delivery, offering services remotely or on-site, long or short-term with big or small datasets to meet our customer’s needs. Our goal is to understand our customer’s business challenges quickly to give them the capabilities to consume data faster, using cutting-edge technologies to drive business efficiencies and ultimately ensure they remain competitive.

Activity

WINNER OF ISSUE III



Sahana Shiva
1 BCOM A
21SJCCC054

MERRY CHRISTMAS

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X	N	L	R	J	F	Z	C	D	N	D	E	X	X	V
H	S	T	A	R	W	S	A	N	T	A	T	L	V	M

BOW	FAMILY	NORTH POLE	SNOW
CANDY CANE	GIVING	PRESENTS	STAR
CAROLS	JINGLE	REINDEER	STOCKINGS
CHRISTMAS	JOY	SANTA	TREES
ELF	LIGHTS	SLEIGH	

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