BIZTECH MAGAZINE

WOXSEN UNIVERSITY
SCHOOL OF BUSINESS

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BIG DATA

Illustration by freepik.com

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Big Data the Future of Marketing and Sales

Big Data revolutionizing every sector.

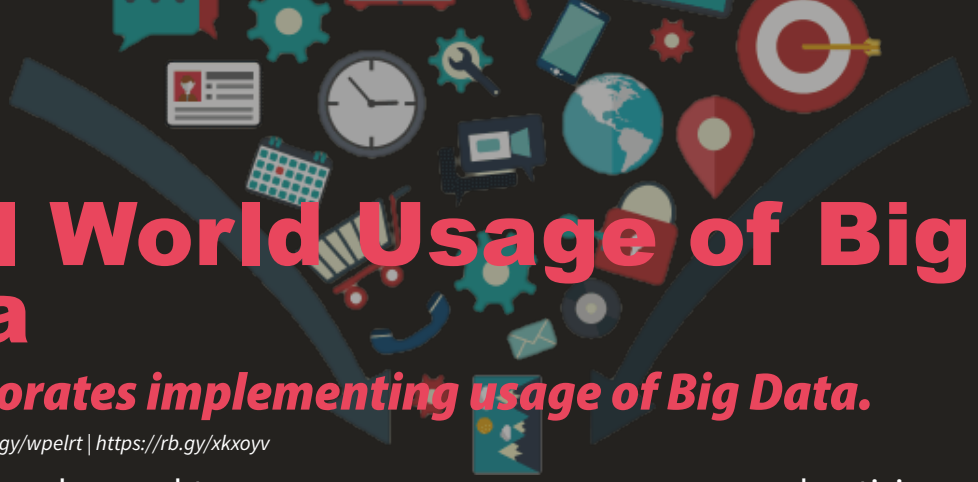
References: https://rb.gy/bm7avt

Big Data is now a flourishing industry that deals with gathering and examining information that is massive and challenging to handle using traditional data processing tools. Given that they may base their judgments on Big Data research, many Indian businesses are willing to invest more and more in the technology. According to current estimates, growth will be roughly 11.5% this year (2021) to reach the $2 billion level. Along with many sectors big data is also augmenting the marketing and sales processes and making it more insightful. An area that is making rapid progress is how prices are determined, controlled, sent across selling networks, and optimised. The use of price optimization for a specific good or service is becoming more feasible because of developments in big data algorithms and sophisticated analytics methods. Today's commodity-driven industries with inelastic products are also streamlining regular price choices. Pricing optimization utilising big data and differentiating pricing methods at the customer-product level are becoming increasingly feasible.

According to a Forrester report, 36% of B2C marketers actively use analytics and data mining to acquire deeper insights and develop more relationship-driven strategies, while 44% of them use big data and analytics to increase responsiveness. As we are witnessing the world progress in terms of everything especially in the field of technology. Everyone is in search of most efficient and time saving ways to get things done. Big Data is a field which fits the criteria that many wants. The growth rate itself shows how rapidly it is increasing so, the spending will be increased much more and Indian marketing and sales should be looking at this more precisely to enhance themselves.

-G.V. Ashwith

Illustration: https://rb.gy/sfdnrr



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Real World Usage of Big Data

Top corporates implementing usage of Big Data.

References: https://rb.gy/wpelrt | https://rb.gy/xkxoyv

Illustration: https://rb.gy/m31sli

Big data can be used to analyze and uncover various patterns and different trends that are present in a collection of information and data and is widely used in enterprises. Making decisions faster makes a business thrive, making the job easier and more profitable. Big data is mainly used in companies to improve business decisions. This allows companies to gain better knowledge of their customers and markets. Internal efficiency and process improvements benefit almost all types of organizations. Modern big data analytics and operations predict customer behavior. Businesses use these patterns to drive brand loyalty as companies gather more information to identify additional trends and discover ways to improve customer satisfaction. It helps to deliver smarter products and services.

Well-known online retailer Amazon uses big data to track how customers spend money on specific products. They track all information about every customer. This entire collected data is for social media advertising algorithms. The devised algorithms can be utilized and implemented to improve customer experience and services, strengthen customer relations, and offer a variety of products. We all recognize Apple's ability to work with cutting-edge technology. As a result, they have adopted big data technology and are now working on big data analytics, with technology guiding many of their decisions. We use the information we collect to determine how best to offer new products and services to consumers. Google analyzes large amounts of data and determines what you want out of it based on a variety of factors, including search history, location, trends, and various other factors. It further goes through a sophisticated estimating algorithm, after which Google displays only ranked or ranked indexed lists in terms of importance and authority that match the user's needs. Big data is at the core of American Express decision-making. Their main goal is to detect and identify fraudu-

lent transactions as early as possible to minimize damage. Big data is used to predict and analyze consumer behavior. Rather than using traditional business knowledge based on previous reports, organizations study recorded transactions and map current forecast models by incorporating over 100 factors. Usage of Big data algorithms are increasing rapidly and are being used in the industry to combat fraud.

Big data is proving to be very useful when companies really want to understand their customers and take their business to the next level. To grow sales today, companies need to pay close attention to their customers and value the information they provide. Moreover, with the development of machine learning, even small businesses can use big data to grow their businesses.

-Krisharth Deepak Misra

"It helps deliver smarter products and services."

Illustration: https://rb.gy/ydgtv2

Transforming Businesses

Big data's impact on the corporate world.

References: https://rb.gy/tt9jkv | https://rb.gy/fwk5ar

Big data shows extreme promise to revolutionize businesses as it permeates small and medium-sized business organizations. Businesses can use big data to uncover vast amounts of information, including insights from sources other than their own data sources. Big data not only enables the efficient collection and storage of large amounts of data, but also enables businesses of all types to analyze that data to better understand their operations.

A collection of data technologies called business intelligence tools are used to provide enhanced business insights which are directly connected to big data. Big data has made enterprise intelligence more accessible. It also makes business intelligence a respectable profession. Some corporates are hiring business intelligence specialists to advance their business. Implementing technology that uses big data means companies can use tools like chatbots to address customer service issues in a timely manner. Big data promises on improving customer service in a proactive fashion followed by enabling businesses to create a more customer-centric product. Product design may put a new emphasis on satisfying consumer demands. Data analytics may be used to forecast what requirements a customer desires from a product rather than depending on trivial feedback. It can assist in gathering information about clients' interests and uncovering patterns by conducting surveys.

Image: https://rb.gy/mqmtv1

IT and cybersecurity professionals are utilizing big data to predict threats, vulnerabilities, and thwart data breaches. Big data combines information acquired from computers and mobile devices with data from networks, cloud systems, and smart devices to uncover potential problems. Resources for analysis include consistent data representation, zero-day attack detection, data sharing across threat detection systems, real-time analytics, sampling and resizing, and limiting. These capabilities are used in data processing and time series analysis for anomaly detection.

-Krisharth Deepak Misra

Illustration: https://rb.gy/x037nq

Why Data Is The DNA of Your Business

Importance of information in the business world.

References: https://rb.gy/r4yoeo | https://rb.gy/zlkvux | https://rb.gy/wwvcv0

Each of the five sensory organs in the human body broadcasts and receives data from all interactions every second. What can scientists now tell us about how much information the human brain processes? In one second, a human receives 10 million pieces of information. Similar to when a computer downloads a file from the internet quickly.

So why is data important?

Although this question appears to be straightforward at first glance, it is actually the result of several other circumstances. Data's ability to give businesses a competitive edge over rivals is one of the most popular reasons for its value.

1. How can we make our product better? How can we help our clients get what they need from us more quickly and easily?
2. How can we entice clients to buy our goods at a price that they are prepared to pay?
3. How can we entice clients to return to us rather than to our rivals?
4. Most importantly, how can we outperform the competitors and expand our company?

Data is the straightforward solution to each of these queries.

Data may be used to manage inventories, determine product pricing, and predict demand in the future. Companies who exploit the insights from big data really get an average 44% gain in sales, according to Forbes. In other words, data helps you better understand what your customers need, enabling you to meet those needs at precisely the right time.

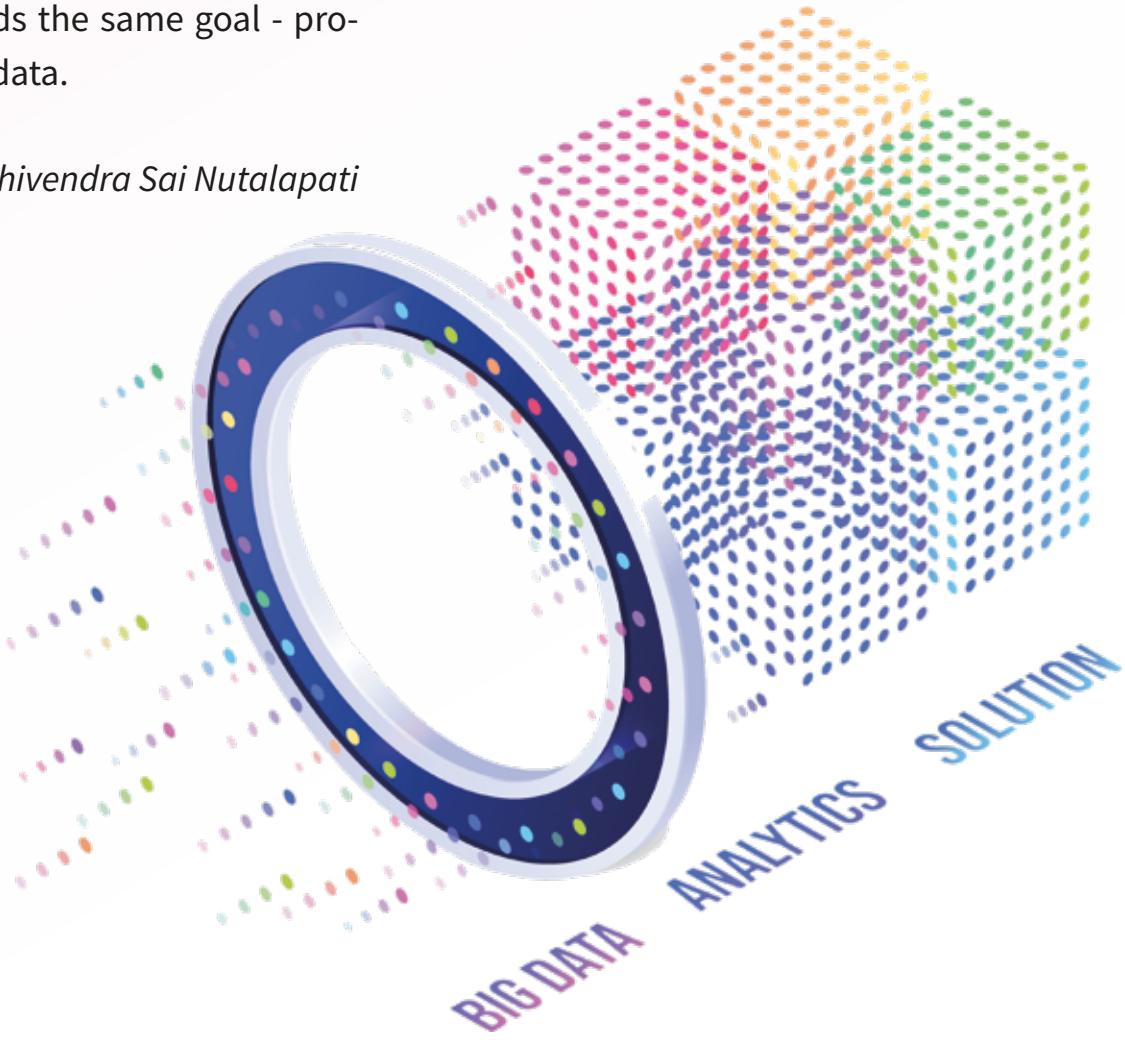
Illustrations: https://rb.gy/axbt6z | https://rb.gy/ts7af5

Using data can help you establish new business models that will help you keep ahead of your competitors in addition to helping you understand your clients' needs better. Data offers potential in every area of the company, therefore it's crucial to find ways to change the way things are done in order to improve operations.

Your firm may accomplish tremendous outcomes not just now but well into the future by making sure that everyone collaborates towards the same goal - pro-actively managing data.

-Shivendra Sai Nutalapati

"Data's ability to give businesses a competitive edge over ricals is one of the ost popular reasons for its value."



Digital Transformation by Companies

A paradigm shift for leaders.

References: https://rb.gy/api6xu | https://rb.gy/qfwgbt

Before planning a brand's digital transformation, it's critical to analyze its goals and understand why a transformation strategy is the best method. The components and process of digital transformation will be guided by the individual firm priorities, goals, and objectives. A genuinely effective digital transformation entails more than simply implementing a new digital tool or two. It is a complex technological fusion that first gathers and orchestrates data, then intelligently utilizes that data to inform the business that collects it, and then combines technology and data insight to offer superior, data-driven consumer brand experiences.

Many businesses, like Domino's, have embraced digital transformation. Listening to customer input and embracing technology enabled Domino's to become the world's largest pizza company, ultimately surpassing its old competitor, Pizza Hut. As a result, it is no surprise that digital channels now account for four-fifths of Domino's sales. To get to where they are now, Domino's had to reinvent the firm's entire mentality, converting it from a fast-food corporation to one filled with programming recruits, digital marketers, and other tech employees. The whole organizational structure was also changed, with an emphasis on internet sales and advertising. Everyone at the top, from the Board of Directors to the CEO, had to be on board.

Illustration: https://rb.gy/5jc19b

Companies' digitization is a successful approach in today's digital economy, and the firm doesn't even have to be a large and well-established one like Volkswagen or Starbucks to achieve it. Regardless of size or money, a firm may begin its transformation operations right now. In order to carry out a seamless change, they must however create a strategy, take appropriate steps, and consult with experts.

-Alekhya Madoori

Decoding The Art of Data Collection

Different ways used by businesses.

References:https://rb.gy/awum9j

We are all aware of how important data is for today's businesses to operate, develop, and enhance. At the same time, we also need to comprehend the data gathering process because diverse data kinds require unique strategies for accurate data collection. Additionally, the data acquired must be accurate; otherwise, the conclusions drawn from the data insights won't be beneficial to us, and in worst-case circumstances, they may even have adverse effects.

Various organisations use a variety of data gathering approaches to obtain the precise data they want. Most businesses directly request customer data. It is a normal practise to ask users to fill out a form when registering with a website. The business requests a name, an email address, and sometimes other personal information like age and gender. Data can also be collected by using cookies and web beacons on websites which allow businesses to track customer browsing patterns. Companies use cookies to track clients' online activities, including their browsing history, keyword searches, and the websites they visit. Email monitoring is frequently used by businesses to determine who opened an email, where they were, and what kind of device they were using. Like this, SDKs from third-party data trackers that are used to obtain customer data are frequently incorporated in apps. When it comes to mobile devices and data on digital consumption, this is the most typical type of data collecting. Few companies also go for data buying from the third-party data sellers. But here the companies need to be very careful about the selection of data sellers as there might be companies giving out inappropriate data that might affect their business negatively.

Given that there are various kinds of data collecting techniques, businesses need to identify right ways to collect legitimate data.

-G.V. Ashwith

Big Data Enhancing Food Tech

Big Data and its benefits everywhere.

References: https://rb.gy/avsriy

According to a study, India's internet meal delivery sector is anticipated to reach $4 billion. In the early 2010s, ordering takeout and having it delivered to your home required a phone call. But few revolutionary online platforms made food ordering online and more convenient.

With the development of technology, we can observe that the food business is successfully implementing big data analytics to offer better services and maintain its competitiveness. The fact that the food sector is attempting to comprehend its consumers and learn about their likes and preferences is evidence of this. As more individuals use the option of ordering food online, the food delivery sector is exploding, generating enormous volumes of data each time a client makes an online food order. the user's preferred flavour, the type of food they want when they place their order, etc. People are often picky eaters, thus by evaluating this data, the meal delivery business can provide a fun experience for its clients. Bigdata is being used by the food tech sector to enhance their menu and speed up meal delivery. As customers choose a platform or restaurant based in part on how quickly food is delivered. Also, it may be utilised to study the feelings of the clients. so that the businesses may make use of the information and provide for their restaurants, so growing their business.

Illustration: https://rb.gy/bj18ys

The food-tech businesses are well-positioned to benefit from the rising demand for restaurant and online meal delivery because to their large networks and well-known brand names. In light of the aforementioned advantages, we think that food-tech firms will continue to expand, therefore you may invest for a listing gain in the impending Zomato IPO.

-G.V. Ashwith

Big Data in World's Biggest Democracy

The current state of big data Analytics in india and where it is going.

References: https://rb.gy/kygzkz | https://rb.gy/gh5uqm

India's Big Data Analytics market is now valued at $2 billion and is anticipated to expand at a CAGR of 26% to reach around $16 billion by 2025, accounting for about 32% of the worldwide market. The Indian big data industry has grown by over eight times, which represents a profitable prospect. There are presently 600 data analytics companies operating in India, one of the top 10 markets for big data analytics, and this number is only anticipated to rise in the coming years.

When it comes to technology and its adoption, the Indian economy is going through a sea of revolutionary changes. One of the many causes fueling the exponential growth of the Indian analytics business is the rising amount of personal data being generated. With a population of over a billion people, more than 400 million Internet users, and over 300 million smartphone users, India is thought to produce a lot of data. Given this context, it goes without saying that Big Data will be essential in paving the way for the next stage of development.

The Indian government recognises the importance of big data in the next years and has already developed a "big data management strategy," which was announced by the Comptroller and Auditor General of India (CAG). The goal of this strategy is to handle the massive amounts of data created by various state and federal government entities. For example, the government is analysing and drawing lessons from India's past and present electricity usage patterns. These will aid in the improvement of power sector governance.The government's drive for digitalization via programmes like the National Optical Fiber Network (NOFN), which intends to link communities with optical fibre and provide high-speed internet connection, is another significant motivator. Being digitally linked across the whole nation might lead to spectacular data consumption and give the big data analytics sector a tremendous boost.

-Harsha Vemula

Illustration: https://rb.gy/5jc19b

Santa Can Give Your Business the Festive Cheer this Christmas

Commercialzied Christmas, Capitalism's best present.

References: https://rb.gy/jidycc | https://rb.gy/mkwr0w

Since the Middle Ages, Christmas has been celebrated as one of the most significant days in the Gregorian calendar, with much fanfare and enthusiasm. During the bleak midst of winter, it's a time to celebrate and feast with friends and family. Furthermore, when people rush to buy gifts, food, and decorations during this time of year, companies' earnings tend to skyrocket. For more than a century, Christmas has been defined by its commercialization, and this tendency shows no indications of abating. In fact, many individuals believe that the commercial component of Christmas has completely spoiled the celebration.

Christmas has eclipsed all other Christian calendar days to become the most important day on the financial calendar as well.

According to Forbes, Christmas sales will bring in $1 trillion for American retailers, accounting for one-fourth of their yearly earnings.

The National Retail Association, on the other hand, estimates the total to be close to $500 billion, which is still an incredible sum.

The Bank of England expects that families in the United Kingdom would spend up to £800 extra on food, beverages, and presents in the months leading up to Christmas, totaling to an additional £19 billion in expenditure.

The majority of merchants rely on Christmas sales to offer a much-needed boost to their revenues until the end of the fiscal year, and this is normally the time of year when they make the most money.

Small businesses may find it difficult to compete with the major chains' discounts, specials, and promotions, but Christmas provides a chance to level the playing field. Because there is strength in numbers, small companies may band together to attract customers and enhance the local economy overall over the Christmas season. It's a great time to get involved or start planning for next year since there are national programmes encouraging customers to shop locally at Christmas.

-Harsha Vemula

Illustration: https://rb.gy/ovrybg

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Run your Business the Right Way!

Without big data, you are blind and deaf and in the middle of a freeway.

References: https://rb.gy/vy4gl8 | https://rb.gy/uosvkv | https://rb.gy/62boie

Business decisions can no longer be made without backup or only on the basis of intuition. Rapid technological advancements have bred greater competition and increased the need for quick, data-driven judgments. You must make a commitment to gathering data, interpreting it, and using it as the foundation for choices if you want to build a strong data-driven culture within your business.

Your company may begin to enjoy the advantages of a data-driven culture with prepared executives making wise decisions. Your operations will run more smoothly, you'll establish yourself as an industry leader, you'll be more in touch with your clientele, your go-to-market strategies will be more successful, and your company will be future-proof.

Pay closer attention to your customers.

By tracking customers, businesses can learn how their clients feel about their goods and services and find areas for development. By gathering such information, you can differentiate yourself from the competition and identify market gaps. But more significantly, asking your consumers for this input in-person shows them that you respect their feedback. Customers are more likely to stick around in the long run if they are involved in creating the roadmap for product improvements.

Automate internal processes.

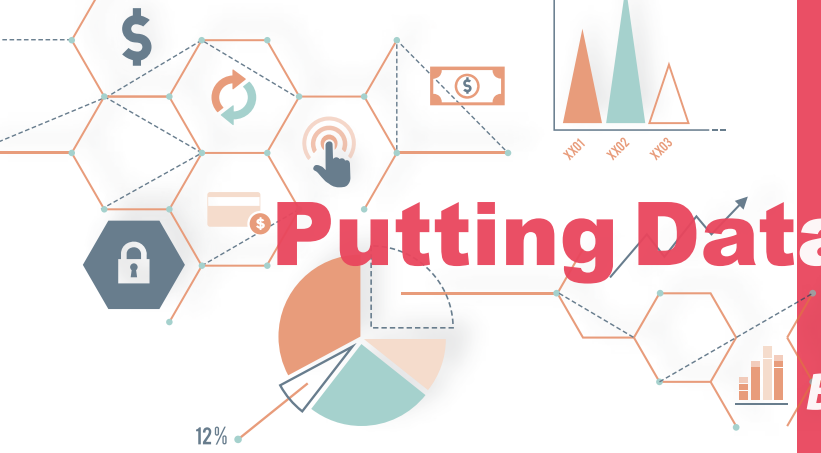
The effectiveness of your company's operations can also be increased by having a strong data-driven culture. You can identify areas for improvement by analysing internal operations with data. You may opt to implement a tiered support strategy after finding out that your support team is taking too long to address support tickets for your smaller clients.

Increasing Data Literacy Throughout the Organization

It's time to double-check all departments for data literacy and an understanding of the data once the organisation has everything set up with unrestricted access and widespread use of the data. The effectiveness of data-driven applications can eventually be considerably increased by involving more staff members through iterative courses and training.

Illustration: macrovector

-Surya Vamsi



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Putting Data to Functional Use

Benefits of Big Data Analytics.

References: https://rb.gy/dqc4ah | https://rb.gy/urfcma

The term "big data analytics" describes how to analyze vast amounts of different data sets using state-of-the-art analytical methods. It provides useful insights for organizations as it applies sophisticated analytics to enormous collections of both structured and unstructured data. Big data analytics is used to find market patterns, insights, and trends that help companies make better business decisions. Companies can use this information to develop strategies quickly and effectively to maintain a competitive advantage.

Incorporating big data analytics into a company or organization has several benefits. Cost savings, big data may save expenses by centralizing all commercial data storage. Monitoring analytics also helps companies identify areas where they can operate more cost-effectively. Creating products based on customer needs and wants, creating and marketing new products, services or brands is very easy. In addition, big data analytics help companies understand product viability and monitor trends. Businesses can optimize cost and supply chain and other decisions through continuous analysis of data.

Big data analytics fall into four main categories and are used to support and positively impact various business decisions. The term "descriptive analytics" describes data that is easy to read and understand. You can use this data to generate reports and information that can explain your business' sales and profits. Diagnostic analytics help businesses find out why a problem occurred. Users of big data technologies and tools can mine and retrieve data that helps analyze problems and avoid future problems. Predictive analytics makes predictions based on historical and current data. Data mining, artificial intelligence (AI), and machine learning enable users to mine information and predict market trends.

-Krisharth Deepak Misra

Illustration: jcomp

Benefits of Data Analytics in Today's Ever-Changing Environment

Unlocking the value of data using data analytics.

References: https://rb.gy/amqaxh

For hundreds of years, humans have used data to monitor performance and influence strategic decision-making, frequently innovating as data sets grew and became more difficult to handle. Augmented analytics has the potential to significantly alter the status of analytics by utilizing self-service, automated solutions to assist enterprises in providing their employees with on-demand access to correct information. This analytics wave incorporates AI, natural language processing (NLP), machine learning (ML), text mining, data analytics and automated data processing into business intelligence (BI) systems. The usage of data analytics in business varies greatly by sector, firm size, and availability to resources.

Data analysis substantially enhances decision-making. Rather than depending just on intuition, businesses are increasingly turning to data before making a choice. Companies are better positioned to produce accurate forecasts when Big Data collaborates with AI, ML, and data mining. Around 65% of HR processes, including payroll processing, candidate screening, and data cleansing, may be supported by automated data processing. According to McKinsey, firms can automate 69% of data processing time, increasing corporate performance while decreasing expenses. Data processing duties range from loan application processing and customer service inquiries to manually processing invoices and forms. In addition, the company predicts that at least 18% of all commercial tasks can be automated.

Illustration: https://rb.gy/elsptk

However, as the volume of data grows at an exponential rate, cybersecurity measures must keep up. Otherwise, firms are exposed to major risks. Another issue is that businesses struggle to make sense of cybersecurity data. According to The Fourth Industrial Revolution, a joint poll conducted by Big Data LDN and Cloudera, 45% of data leaders said that data visualization is the most significant impediment to attaining target objectives.

-Alekhya Madoori

The Big Data Revolution for Business is here!

Big data is changing business forever by turning data into dollars.

References: https://rb.gy/6lf0zg | https://rb.gy/kd9oen | https://rb.gy/zjwlau

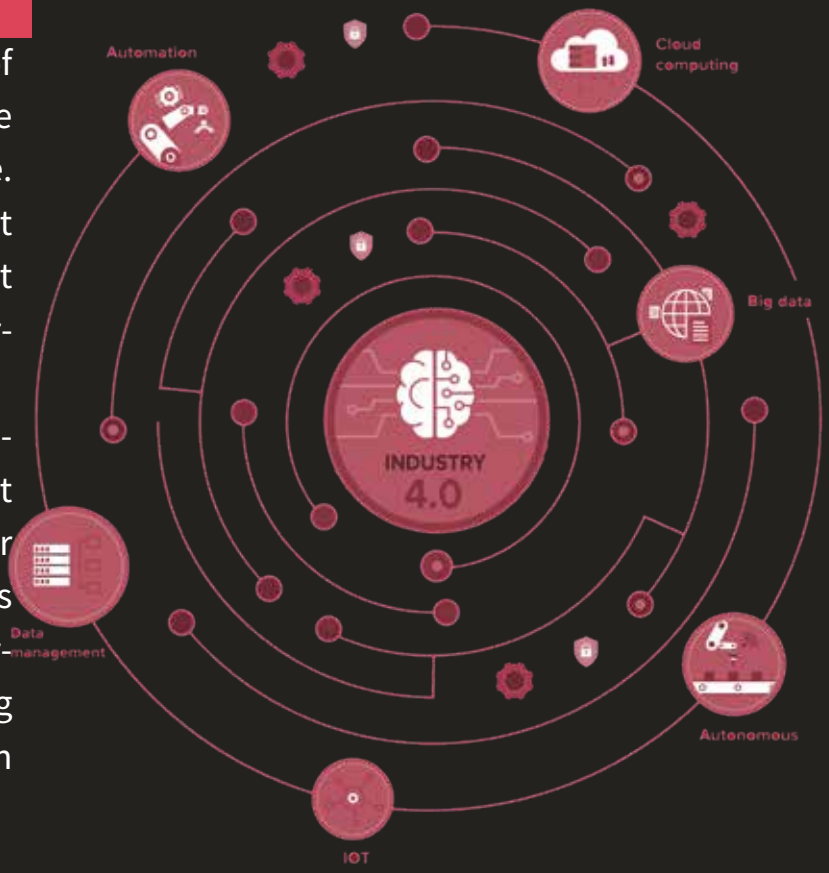
The big data phenomenon is shaping the current information landscape, but its implications on business are growing at previously unheard-of speeds. According to the AI Executive Survey conducted by NewVantagePartners, 98.8% of top organisations believe in investing in big data and artificial intelligence skills. Furthermore, according to Statista, revenue from big data and business analytics will equal $274.3 billion worldwide by 2023. It is more than four times the revenue from 2018, but less than half the revenue from 2019.

Big data embodies a core concept of modern AI: the more data you have, the more accurate your projections will be. There are several benefits to big data, but it is critical to concentrate on the three most important ones since they drive the majority of big data investment.

Big data helps to increase the cost-effective quality of products and services. It increases process efficiency and allows for the construction of detailed user journeys to enhance customer experiences via personalization and precise targeting. Big data is also used in analytics to find hidden linkages and patterns.

In addition, nearly no industry ignores big data. Retailers use it to predict consumer behaviour. Advertising tailors goods in order to locate the ideal consumer. Finance is developing more complicated and detailed trading algorithms. Big data is critical in logistics and transportation for monitoring operational details and improving safety. Big data has an influence on every organisation, and it seems that this trend will only grow.

-Harsha Vemula



How Big Can You Go With Big Data?

This is how big data can help your company.

References: https://rb.gy/vgws6b | https://rb.gy/tvizus

Photo by Manuel Geissinger

Regardless of size, every business organisation needs insightful data. Big data plays a crucial role in helping you understand your target market and customers' preferences. You can even foresee their needs thanks to it. It's important to effectively convey and analyse the appropriate data. It can assist a company in achieving a number of objectives.

The use of big data can generate several new prospects for business expansion, say experts. Even new types of firms, such as those that analyse and compile data from the industry, may emerge as a result. The majority of these businesses will be positioned in the centre of extensive information flows concerning goods and services, suppliers and customers, consumer intent and preferences, and more. Businesses in all sectors need to start developing their Big Data skills quickly.

Big Data gives

1. Better Customer Insights
2. Increased Market Intelligence
3. Data Driven Innovation
4. Re develop Products
5. Perform Risk Analysis

Any many more. Nevertheless, the commercial advantages and benefits that big data may provide are well worth the work. Modern company depends on big data, which is also one of your best resources for implementing smart, long-lasting change within an organisation and outpacing competitors.

-Shivendra Sai Nutalapati

Illustration: https://rb.gy/zrthx8

Is Your Approach Coping Up to the Right Trend?

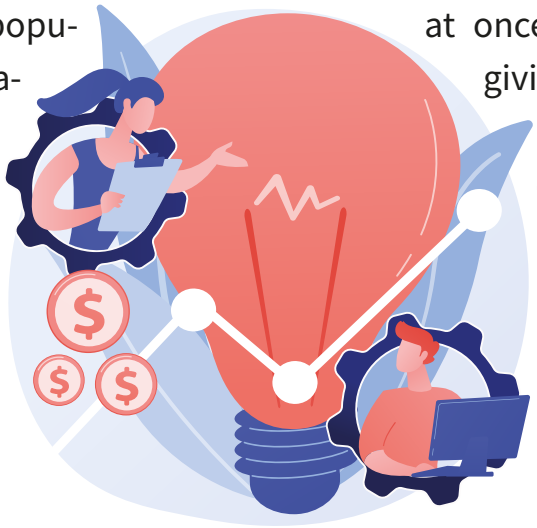
Modern day solutions for the Modern World.

References: https://rb.gy/jy2ftb | https://rb.gy/xl6all

Big data is no longer a cutting-edge technology; all of we now accept it.Big data adoption increased to 59% in 2018, according to the Dresner Advisory Services' 2018 Big Data Analytics Market Study, and it is still rising. Less than 10% of businesses say they have "no plans" to utilise big data, therefore practically everyone is already using it. Analytics is the logical next step as big data use rises in order to make sense of the data effectively and morally. As they develop, current technological advancements in data analytics will influence the markets and employment in the field.

Data as a Service

Generally, data is kept in repositories explicitly created for a given application. SaaS was only getting started at the time when (software as a service) became popular. Data-as-a-service applications, like software-as-a-service ones, incentive cloud technology to provide users and applications with on-demand access to information no matter the location of those users or apps.



IoT will Overcome its Analytics Challenge

Intelligent refrigerators and connected washing machines don't yet have the market they were expected to have, despite the internet of things (IoT) becoming a popular concept a couple of years ago. But IoT has been quite successful in the industrial markets. IoT is having a significant impact on the production and supply chain.It will gain it's momentum.

Quantum Computing

Processing a large volume of data can take a long time with today's technology. As opposed to classical computers, quantum computers estimate the probability of an object's state or an event before they are measured, indicating that they can process more data. We can drastically cut processing time if we can compress billions of data at once in only a few minutes, giving organisations the chance to make quick decisions to achieve more desired outcomes.

-Surya Vamsi

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