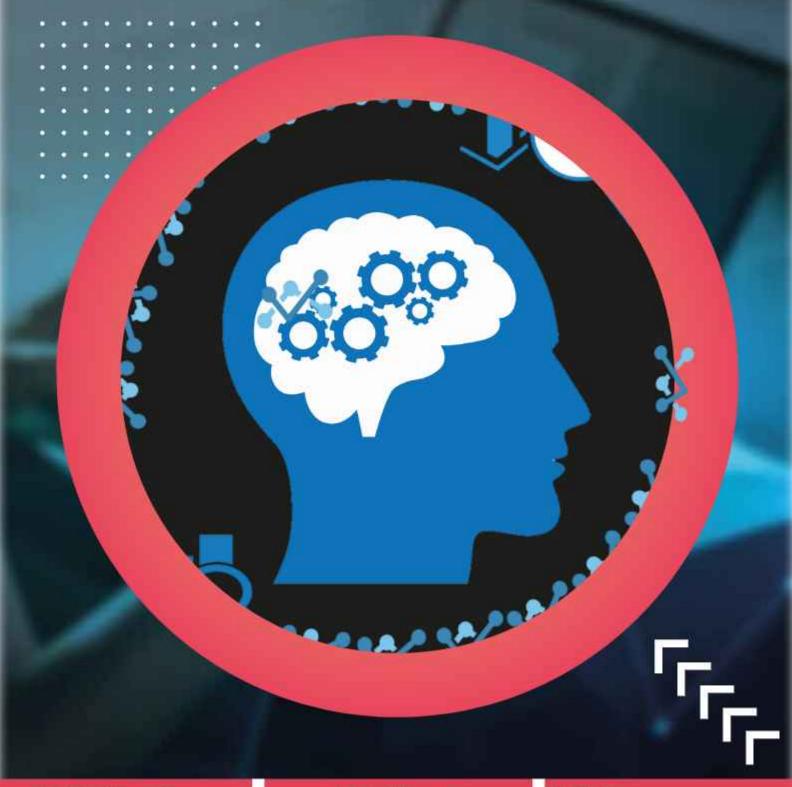
BIZTECH

WOXSEN UNIVERSITY SCHOOL OF BUSINESS

MAGAZINE

Edition: 23 | NOVEMBER '22



PG.01 I What if you could...

PG.07 | Data is information...

PG.14 I Why you must implement... predictive models in



CYBER CAUTION: ONLINE SAFETY TIPS

01	WHAT IF YOU COULD SEE THE FUTURE?
02	PREDICTING THE FUTURE IS NO MORE A SUPERPOWER!
03	DATA ANALYTICS; THE TRUE DRIVER OF A BUSINESS.
04	PREDICTIVE ANALYSIS IN A FAST PACED ENVIRONMENT
05	LEADING TOOLS AND SOFTWARE WHICH IMPLEMENT PREDICTIVE ANALYSIS
06	THE RIGHT SHIFT A BUSINESS NEEDS TO ACCELERATE.
07	DATA IS INFORMATION, INFORMATION IS THE TREATMENT.
08	BUSINESSES AUGMENTING VIA APPLIED PA
09	IMPENDING ANALYTICS FOR FUTURE
10	PREDICTIVE ANALYTICS: BUSINESS INTELLIGENCE'S NEXT BIG FRONTIER
11	TOP 3 PREDICTIVE ANALYTICS TOOLS THAT CAN UNLEASH THE POWER OF DATA FOR ANY BUSINESS
12	PREDICTIVE TECHNOLOGIES INCORPORATION IN THE BUSINESS ENVIRONMENT
13	IMPORTANCE OF PREDICTIVE ANALYSIS IN A DATA DRIVEN MARKET.
(14)	WHY YOU MUST IMPLEMENT PREDICTIVE MODELS IN







WHAT IF YOU COU SEE THE FUTURE?

Leveraging the power of predictive analytics to give any business a competitive edge

A business using data to derive insights and make better strategic decisions is not a new trend; these methods were conventionally known as "business intelligence," which until recently limited only to data analytics (analyzing past data). Predictive analytics is a new addition where now, instead of just analyzing past data, you can track the data in real time, and a model will find patterns and make predictions for the future. In his latest book, "Predictive Analytics," Eric Siegel claims that this ability can predict who will click, buy, lie, or die. Although he refers to his book as a primer, the real-world examples he uses to illustrate these points show how predictive analytics unleashes the power of data and how "big data" embodies a remarkable wealth of experience.

For obvious reasons, this can give any company a huge advantage if done right. Here are some practical use cases for predictive analytics.

Targeted Marketing: Using various digital marketing tools, we can target our perfect customer and present your product on his social media, which has a much higher conversion rate than traditional mass media campaigns.



Investment Risk Management:

Predictive analytics are also incredibly useful for making investment decisions as they give us a very easy way to understand risk better, back test investment ideas, etc. They predict not just the value of securities but also identify companies to partner with and acquire, proving to be next-level deal-

DIFFICULTY making instruments.

Customer retention: Predictive analytics can help businesses understand their customers better, why customers chose them, and what will make them leave. These insights could be leveraged to improve customer retention for any business.

Apart from these applications, there could be many more use cases for predictive analytics, and before we know it, predictive analytics could be the norm for every business out there.

HARSHA





Predicting the Future is No More a Superpower!

By using big data, we can model techniques to make future outcomes and it's performance.

The heart of most businesses is data, mainly historical data i.e. data pertaining to the past, and consumer data which is market research. Using this data, businesses build decision support systems or in other words, predictive analytics, to aid them in complex decision making. This entire process makes up the world of "Business Intelligence".

But where can you use this predictive analytics? Well, some of the examples are optimized service delivery. Ecommerce websites like amazon and ebay use past purchases to recommend similar products to instigate similar consumer behavior. It helps better police fraudulent activities. Did you know that fraud has cost the global economy a whopping \$5 trillion dollars. Luckily, predictive analytics could help us prevent this. Finally, it also helps us in bettering our marketing efforts by effectively creating and simulating perfect market research for effective marketing.

So now you want to build a robust predictive analytical model. These are some of the basic steps -

- 1 First identify the business objective businesses have goals, identify those goals
- Understand the data model Find out the places from which your data is being generated.
- Prepare the data the raw data you have has to be transformed into information waiting to be used in the predictive model
- 4 Develop, test, and deploy the predictive model
- 5 Monitor for effectiveness By monitoring the predictive model, we can have find problems and enhance the model

The business world is a very competitive environment, and with the changing world order, most businesses have to stay on their toes and must be ready for anything.

References https://seleritysas.com/blog/2021/08/14/the-importance-of-predictive-analytics-in-business-intelli

- Shivendra Sai





Data Analytics; the True Driver of a Business

Data is the new oil

The total amount of data generated by the internet world by 2020 was 44 zettabytes or about 40 times as many bytes as there are stars in the visible universe. The growth of big data is predicted to continue; by 2025, 463 exabytes of data per day will be produced on average. Data analytics may help an organisation from targeting a marketing message to a particular client to identifying and reducing business problems.

Maximize engagement and productivity among employees

Modern HR systems are made possible by big data, which managers may utilise to boost productivity and retention. According to research, employing a human resource management system (HRMS) that interacts with corporate data can lead to improved management of people, organisational, recruiting, training, and compensation processes as well as employee performance and engagement.



Reduce risk and deal with hiccups

In business, risks abound. They consist of employee safety, legal liabilities, uncollected debts, and customer or staff fraud. An organisation may use data analytics to better evaluate hazards and implement preventative actions. As a result, big businesses that access internal and external data need to deploy risk management analytics to protect their resources, clients, and reputation.

Analyzing consumer behaviour will improve the customer experience

A solid data analytics strategy will determine the direction of customer care in the future. Companies now have access to a wide range of data sets, says McKinsey & Company, including internal data on customer interactions, transactions, and profiles easily available third-party data sets that cover customer attitudes, purchase behaviours, preferences, and digital behaviours and new data sets on customer health, sentiment, and location provided by the Internet of Things (IoT)

- Surya

a. https://online.sbu.edu/news/data-analytics-improve-business b. https://www.stitchdata.com/resources/benefits-of-data-analytics/





PREDICTIVE ANALYSIS IN A FAST-PACED ENVIRONMENT

And how businesses are adapting to it.

Predictive analytics makes accurate forecasts based on digital data using artificial intelligence (AI). Advanced algorithms link data points far faster and more precisely than humans, resulting in reliable, actionable insights. This has altered the way many firms function presently. Companies in almost every area have noticed significant gains after deploying this technology. As more individuals recognize the benefits, it may become the norm.

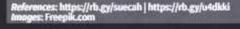


Predictive analytics, like any other technology, is not a cure. It might not cure every difficulty that a firm encounter, especially without thorough design and implementation, but it may provide significant assistance. It will surely alter the way businesses operate. It is provided by several suppliers, including IBM, SAP, and SAS. It analyses the collected data to get the particular solu-

tions a company needs. Using specifically designed algorithms, they can forecast future trends and issues based on historical behaviour.

Real estate brokers can use predictive analytics to assist purchasers with predicted house prices. This is also an excellent approach to reassure sellers that their house is priced correctly. It is used in health care to predict which treatments are most likely to be beneficial based on each patient's unique and full health history, rather than one department's siloed data. It also aids in the simplification of the process of evaluating massive quantities of data created throughout the software testing process by utilizing the data in predicting results. Predictive analysis is used in a variety of fields, including real estate, fundraising, and health care, and has become an essential component of today's fast-paced commercial climate.

-Alekhya Madoori







PREDICTIVE ANALYTICS: BUSINESS INTELLIGENCE'S NEXT **BIG FRONTIER**

HOW TO CHOOSE BETWEEN TRADITIONAL BUSINESS INTELLIGENCE AND PREDICTIVE ANALYTICS?



More and more organizations are moving to data-driven strategies and operations. Organizations have to make a choice between business intelligence and predictive analytics. Any decision that relates to being data-driven needs to be carefully considered because these technologies play out over a very long period of time, and to properly implement these methods, it takes the hiring of new staff, training, and optimization over a long period of time.

While there are some similarities, there are also significant differences between business intelligence and predictive analytics. The primary distinction between business intelligence and predictive analytics is that the former seeks to answer queries such as "what occurs now" and "what is occurring now," while the latter provides a more practical way to assess information.

Decision-making: Business intelligence assists individuals in making choices based on insights, whereas predictive analytics assists firms in making judgments based on facts and data sets.

Business intelligence has both predictive analytics and data analytics, whereas predictive analytics is just limited to predictions of various types. Predictive analytics is a kind of business intelligence, just like calculus is a type of mathematics.

When it comes to choosing between BI and predictive analytics, it depends on the type of business, what kind of data they generate, and whether their primary goal is to fine tune their everyday operations or to just predict future demand and productivity. If their goal is to just predict, as they don't collect day to day operations data, they should choose predictive analytics. But if they are a big organization generating a lot of data on an everyday basis and they want to make their operations more agile while also gaining predictive power, they should choose business intelligence.

- HARSHA



The Right Shift a Business Needs to Accelerate

"What if" you can predict the future?

Organisations now have more access to business options thanks to predictive analytics. It provides a fresh and useful approach for businesspeople to look into the future, enabling them to enhance their marketing techniques and business operations. The reason for this is that digital transformation alters the organization's capabilities and vision, as well as how it operates.

In order to obtain greater information, organisational and corporate analytics are investigating several predictive analytics techniques. There are several benefits to accepting predictive analytics due to its adaptability in nature. Using predictive analytics in this competitive marketing is very important for understanding competitor behaviour and improving firm profitability. To obtain more exact results in the areas of customer buying trends, market circumstances, and other topics, you need data-driven insights.

Organizations may benefit from predictive analytics by using what-if scenarios.

It is possible to anticipate if particular expansions in various sectors are profitable or not using a strong predictive framework. Without having to commit resources before determining whether a change will have a favourable or negative influence on the future of the firm, it makes it easier to plan out prospective changes to operational structures. A company that has a data platform with trustworthy and dependable data can unquestionably have a predictive analytical platform that is likewise reliable, accessible and fast.

Having a prediction model that predicts when seasonal changes will happen is of great value. Even more so is one that also discusses the reasons behind such seasonal variations. It's possible that the organisation is aware of these changes ahead. But there are advantages to giving these views some level of assurance through scientific evidence.

a. https://www.forbes.com/sites/tableau/2021/06/02/how-the-power-of-predictive-analytics-can-transform-business/?sh=431030bda279 b. https://syntagium.com.au/how-the-power-of-predictive-analyt- Surya



Data is information, Information is the Treatment



Right companion for a health practitioner?



The use of predictive analytics is expanding, and it has proven to be highly beneficial across a number of sectors, including manufacturing, marketing, law, criminal justice, fraud detection, and healthcare. Predictive analytics, which is a cutting-edge technology that is now recognised as being a crucial component of the delivery of healthcare services, stands to benefit the healthcare industry and its numerous stakeholders in particular.

Increasing outreach and patient engagement
Predictive analytics in healthcare may be used by

medical institutions to connect patients and improve their interactions with doctors. These technologies can aid in the development of patient profiles, the delivery of personalised messages, and the establishment of more personalized strategies.

Predictive healthcare analytics for disease outbreak detection

Predictive analytics in healthcare continues to aid authorities and common citizens in understanding the epidemic. While discussing epidemic predictions, if predictive analytics might have predicted the COVID-19 pandemic. Yes, it is the solution. On December 30, 2019, BlueDot, a Canadian business that creates Al and predictive analytics solutions, issued a warning over the increase in instances of unidentified pneumonia in Wuhan. The World Health Organization officially announced the appearance of the new coronavirus just nine days later.

Risks

The fact that people are more willing to accept risks when they are aware they are protected is one example of moral hazard in effect. As they attribute the results of their actions to predictive analytics, some doctors could no longer give their recommendations any thought. Everyone concerned must realise that some choices made by analytical tools are not final but are only suggestions in order to reduce this danger. During visits, it can be difficult to strike a balance between patient attention and data gathering.

 a. https://www2.deloitte.com/us/en/insights/topics/analytics/predictive-analytics-health-care-value-risks.html

b. https://itrexgroup.com/blog/predictive-analytics-in-healthcare-top-use-cases/





Businesses Augmenting via Applied PA

Applied PA deciphering challenges

Many businesses use applied predictive analytics to help them overcome difficult problems they encounter in the rapidly changing world of today. Companies are now using technology that help them offer goods and services to clients effectively as they comprehend the value of predictive analytics.

An American family insurance firm used predictive analytics to make data-driven decisions and provide service levels that would encourage long-term client loyalty. A test vs control impact is the best approach to assess a program's influence and if it is worthwhile of additional investment, therefore a more rigorous testing process was the logical next step. Through in-market testing, they got knowledge that enables them to constantly improve the experience for our clients and to deliver truly great



value this was achieved with the assistance of applied predictive analytics. An American greetings company with the aid of applied predictive analytics to capacity the test and learn to get a strong analytical framework and method for assessing and customising business activities to maximise their value. For them and their retail partners, they have been able to pinpoint precise incremental profit potential worth millions of dollars. This made them not just as suppliers but as the partners. Even large corporations like Amazon and Netflix used predictive analytics as part of their marketing strategy to identify the customers who were most likely to stop using their services and try to reactivate them. As we all are aware, acquiring a new client is more expensive than keeping an old one.

Many more businesses are turning to applied predictive analytics to help them gain market share and offer their clients better services. With time, there will be a growth in the number of businesses utilising applied predictive analytics technology.

- G.V. Ashwith

Source link: https://www.featuredcustomers.com/vendor/applied-predictive-technologies/testimonials Image link: https://www.nclouds.com/blog/aws-data-analytics-best-practices/



Impending Analytics for Future



Getting Started with Predictive Analytics

One thing that is exceedingly difficult to get right is predictions. To know what may be expected soon based on trends and analysis done with the use of accessible data, predictive analytics has therefore become one of the crucial parts of analytics for a corporation. Predictive analytics deployment should be prioritised in order to ensure that predictions and analyses are accurate and produce the intended outcomes.

Predictive analytics systems are frequently guided by the Cross Industry Norm Process for Pattern Discovery (CRISP-DM) concept. The circular framework will help you incorporate your results into routine business operations, and this multi-industry framework will assist your team in developing predictive models based on the data you already have.



Instead of depending just on past data, there should be a practice in data analysis through the gathering of client demand data, market research, and analysis of Google search patterns. Along with thorough comprehension of the data and metrics required to evaluate outcomes, knowledge of the region on which predictions must be made is also necessary. When using predictive analytics, it is crucial to define the goal explicitly. The most important condition for prediction is having access to the data that we need. When you can show that the anticipated outcomes are true or almost true to the desired outcomes, you may exhibit the framework to stakeholders. With the available data and the predictive analytics frameworks, begin analysing and receiving results. The effectiveness of the result we obtain depends on our ability to grasp predictive analytics and to use it effectively. Achieving the necessary and right conclusion will be aided by having a clear aim, infrastructure, the appropriate tools, and applying them effectively. If the implementation is inefficient the outcomes will reflect the same.

Source Link: - https://www.logility.com/blog/how-to-implement-predictive-analytics-into-your-company/ Image Link: https://developer.thingworx.com/resources/guides/analyt-G.V.Ashwith





PREDICTIVE ANALYTICS IMPLEMENTATION

Predicting future trends based on past data, using leading tools and software.

Platforms for predictive analytics examine past data and seek for future trends. Regression anal-



ysis, data from client purchases, weather reports, and banking habits are used in the process, along with the presumption that historical tendencies will continue into the future. The use of statistics and modelling approaches to forecast future results and performance is known as predictive analytics. It is the practise of predicting future out-



comes and performance using statistics and modelling techniques. Data analytics helps businesses in a variety of ways, including helping them make better informed decisions about how to use their resources and how much to charge for their products and services. By using data analytics software, we can collect and analyse data, businesses may create reports and

dashboards that aid in trend discovery and client comprehension.

Some of the top software and tools for predictive analysis includes Alteryx, IBM SPSS, Tableau and Databricks. Tableau assists in putting knowledge into practise, shortens analysis times, and alters behaviours to make everyone in the organisation more data-driven. It is an all-encompassing data and analytics platform with APIs, security, governance, and compliance. Tableau provides data-driven behaviours, values strategic data usage, and promotes data sharing. Through a library of machine learning techniques, text analysis, and open-source extensibility created for interaction with big data and easy deployment into applications, IBM SPSS is used for advanced statistical data analysis.

Almost every business may benefit from the use of predictive analytics, including the financial sector, the IT sector, marketing research, and more. Predictive models are used for a variety of tasks, including establishing credit risk models, resource management, determining & observing trends, anticipating inventories, and much more.

-Krisharth Deepak Misra



TOP 3 PREDICTIVE ANALYTICS TOOLS THAT CAN UNLEASH THE POWER OF DATA FOR ANY BUSINESS

PREDICTIVE ANALYTICS TOOLS ARE EVERYWHERE, BUT HOW DO YOU CHOOSE THE RIGHT ONE?



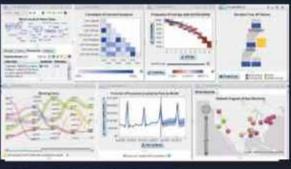
Business intelligence tools are getting better and faster every day, and the predictive analytics market is set to reach a cumulative valuation of \$ 21.5 billion by 2025. We have witnessed the evolution from basic statistical models to using advanced algorithms, artificial intelligence, and neural networks. There is no doubt that these tools when implemented appropriately can level up any business but with the plethora of options out there it becomes a crucial decision choosing the right tools for your business. So there cannot be one size fits all kinds of lists. It has to be highly individualised, but here are the top 3 tools that could be leveraged by most businesses.

State Teacher Teacher Control of Teacher Control of

Hana is a one stop solution for many predictive analytics tools, it provides club based databases and application servers, which enables remote monitoring and it is capable of building predictive models out of it and comes with additional plugins for external big data analytics and it can also be connected to additional predictive analytical libraries(PLA's)



Zoominfo is an amazing predictive marketing software tool, it offers data configuration and maps millions of B2B accounts, referencing this data with your site usage information and current customer data to build an actionable database. Basically, after providing ZoomInfo with your search criteria, the program creates matching customer segments with accounts and contacts that are most likely to convert.



SAS is market leader in the predictive analytics industry with over 33% of market share SAS offers a very wide range of services on its platforms from visually representing real time data, automation features, decision support features and supply chain tracking features.it is best known for its ability to process data quickly.





Predictive Technologies Incorporation in the Business Environment

Firms' adjustment to new technological advancements

Modern technologies are evolving at breakneck speed, and individuals and organizations are struggling to keep up. With new applications and gadgets appearing quicker than ever on the IT industry landscape, the field service management arena is preparing to harness these technologies to succeed in numerous operational elements. Continually gauging consumer preferences is critical to success in field service management. All developing field service management software is based around the same concept—improving customer services and experiences. Providing the ideal client experience is becoming increasingly important in field service operations. According to a recent research, field service providers who focus on providing individualized experiences would see a 15% increase in income and a 20% decrease in customer service costs.

The field service management industry is quickly adopting cloud computing technologies as information and data become available on the cloud. They are becoming more efficient and empowered as a result of cloud-based tools and services that function in real-time to provide technicians with on-the-go access to training materials and data. Not only data access, but also a variety of other functionalities, such as lodging a request for field service tools or parts, scheduling field service jobs, receiving payments, renewing maintenance contracts and agreements, and using social media to communicate issues in field services on-the-go to get instant support from managers and peers, can be realized with cloud computing.

With the ever-changing world and newer technology, new businesses have also emerged to capitalize on the innovations. Firms enjoy CLOUD SERVICES, which allow businesses to benefit from elastic scalability and speedier go-to-market capabilities from Google, Amazon, Oracle, or Microsoft Cloud Platforms, and DATA SERVICES, which help translate data to information through data analytics, big data, and data warehousing.

- Alekhya Madoori

Sources https://predictive-technologies.com/it/ https://www.fieldez.com/3-technologies-crucial-predictive-field-service/





Importance of Predictive Analysis in a Data Driven Market

Searching for future trends.

Data driven marketing is the practise of gathering and analysing customer, prospect, market, and competitor data by marketers to make the best decisions and increase chances of sales and revenue. A company may use data to understand customer behaviour and purchase decisions by analysing previously collected data.

Predictive analytics, a deft fusion of Big Data and AI, involves a procedure to gather behavioural information about clients and prospects, including information about their buying path. The AI makes pertinent real-time recommendations and modifications with the aim of increasing visitor engagement and optimising conversion rates. By learning from interactions and the most frequent questions, AI driven marketing automation tools like chatbots may deliver automated, intelligent customer assistance. The capacity of predictive marketing to change over time is another aspect of its strength. Brands can continually improve and expand their awareness of their consumers thanks to AI and machine learning, which results in a better grasp of their audience and greater accuracy in how precisely they can contact them and inspire engagement.

Data-driven marketing may be a very effective tool and result in improved customer experiences, which over time can increase consumer appreciation of your brand. Data-driven marketers are utilising breakthroughs like predictive analytics through unified marketing measurement, marketing analytics tools, AI, and machine learning to stay competitive in today's marketplace.

- Krisharth Deepak Misra



Sources: https://www.marketingevolution.com/knowledge-center/the-role-of-predictive-analytics-in-data-driven-marketing https://www.clicdata.com/blog/what-is-data-driven-and-predictive-marketing/





Top 3 reasons why predictive models might be the best thing for your business

So all this while, you have been reading about predictive analytics and all its glory. But why? Why should you be working on predictive models?

Well, there are plenty of reasons on how predictive models can streamline your business processes and can help you become a business that is nothing less of efficiency and effectiveness, but here are top 3 reasons why

- Compete Secure the Most Powerful and Unique Competitive Stronghold.

 The very sharpest competitive edge. By giving your company an exclusive source of business knowledge with which to compete for sales and the retention of clients, predictive analytics creates powerful, distinctive, qualitative advantages. Know competitor weaknesses before they do. In contrast to broad trends that may be observed on a macro scale, a predictive model extracts more nuanced purchasing patterns and trends in the form of consumer microsegments.
- Improve –Optimize Your Competitive Core Business Capability
 In many respects, predictive analytics enhances the design, testing, and repair of products.
 The assembly line is where defective products are found during manufacture. Reliability
 modeling identifies which parts of a product are likely to malfunction or, in response to
 client calls, which are likely to need repair, so they can be loaded onto a deployed vehicle
 once they are in the field. One roadside service company enhanced its decisions regarding
 the necessity to dispatch a service vehicle in response to calls for auto repair.
- Analytically, learn from your mistakes. With predictive analytics, the business actually learns how to lower risk. Every unsuccessful result offers a chance to learn something from it methodically. Because of this, the data from which predictive modeling learns includes both successful and unsuccessful examples, successes and unavoidable "mistakes." Both of these experience types offer crucial situations from which to learn. Analytical approaches can utilise 100% of the data to learn from every outcome a firm has seen, even if the training data contains far more of one than the other, as is the case with direct mail, which frequently demonstrates only a small amount of positive reaction.

Predictive analysis does much more than this, and with the advancement of technology, predictive analysis will soon become the driving factor of most business operations. The future is here and it's not going to wait for you to catch up.

References

https://treehousetechgroup.com/top-3 ways-that-predictive-analytics-can-impact-business-outcomes/ https://thekeenfolks.com/predictive-analytics/ https://www.ibm.com/downloads/cas/LIMPR8AJ - Shivendra Sai





Behind The Scenes



MANAGING EDITOR

Hridya Koduri EDITORS

Diya Gupta Noyonika Sahoo

Pusarla Bhuvan Sathvik

WRITERS

Krisharth Deepak Misra

G.V. Ashwith

Surya Vamshi

Harsha Vemula

Alekhya Madoori

Shivendra Sai Nutalapati RESEARCH EDITORS

Mikkilineni Varshini Snehamayee G.M.

BLUE PENCILERS

Dheeraj Anchuri

GRAPHIC DESIGNERS

Sai Kiran Kadari Swathi Priya C. Devi Sayithi Kadari Mantosh Mahapatra

