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SIGNIFICANCE OF ANALYTICS

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Abstract:
Despite the number of times marketers have been using analytics as a tool to predict and drive consumer behavior, it is a relatively new application of the science. Technology continues to evolve and offers even more data choices and metrics for analysis, increasing the abilities of marketers to reach their audience. This article expands on several sectors of use, including real estate, social media, and healthcare, and theorizes the impact that analytics will have in the future as the technological means to interpret data catches up with the sheer amount of real-time information available for potential use, especially with the development of the Internet of Things, and rising concerns around data use, regarding data protection and copyright.

Keywords: data analytics, data visualization, data protection, smartphone, big data frameworks, big data copyrights

1. Introduction

Companies and industries have extensively incorporated the use of analytics to rationalize procedures and enhance predictions. Executing plans based on data analytics requires intellectual and operative commercial adoptions, which may sound simple, but is not easy. Investigating data more frequently leads to upsurges in productivity and serves to identify novel commercial prospects that might have been else disregarded, which mainly includes unexploited purchaser sections. As these populations are liable to

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convert to customers, the probability for development and effectiveness turns out to be a wise investment and an endless source of new potential. Businesses accumulate evidence from intersecting points between their business and defined associations. This provides them with a viable benefit in far sighting desirable enhancements where sales may be augmented. It also empowers corporations towards identifying probable breaches in the marketplace (Gamage, 2020).

For data to be usable across all segments of the business to improve efficiency and decision-making, it has to be manageable. Data analytics has evolved into a significant tool in every category of administration. Through reading the data across segments a corporation can achieve real-time perceptions into business, sales, promotion, product expansion, in addition to further procedures. These perceptions empower crews inside a business to work together well, accomplish improved consequences, and outpace the opposition. Data analytics empowers workers to interpret data in the background along with making intelligent corporate verdicts to accomplish enhanced goods and facilities. Countless specialists can distinguish short-term tendencies, but it is harder to forecast difficulties that may develop long-term associated with these changes. Mainframe representations created on data analytics benefit corporations to perceive the changes in how consumers purchase and deliver a prediction of which products need to be emphasized or rationalized. In issues of production, facilities, or workforce shortages, analytics can benefit to highlight whether production will be beneficial once the ability to produce returns. Data analytics can likewise be employed within human resources. Implementation of machine learning and artificial intelligence are converting the acquisition procedure in numerous establishments, while execution of data analytics in public administration is updating verdicts on elevations, performance assessments, operative assignation, and proficient growth. Data analysis provides corporate workers with a profession and a more complete interpretation of their productivity for administration (Mao et al., 2017).

Analytics have leveraged organizations in improvising their performance as well as creating a better product line through:

- Improving service level performance;
- Personalizing user experience;
- Informing the decision-making process;
- Streamlining the operations;
- Mitigating risks and handling challenges;
- Enhancing security;
- Providing better fulfilment of services and facilities;
- Improving supply chain management;
- Improving promotions and product management.

2. Phases of Analytics

Business data analytics encompasses the procedure of investigating a huge and variable set of data to discover the unidentified relationships, the association between them, the

patterns, the behavioral experience of the consumers, and other important insights that help the organization make improved business decisions leading towards novel innovative opportunities, business modifications and standing out from the crowd. It is essential for a business analyst to know how to interpret and execute that data using the appropriate tools correctly. Owing to this, it is worthy to know about the three major business analytic phases (Broeders et al., 2017).

2.1 Descriptive Analytics

Also known as the reporting stage, Descriptive Analytics is the primary phase of analytics, which comprises assembling, unifying and unfolding the features of the data. This phase is beneficial in describing the conditions of the situation and the consequences of the actions in question.

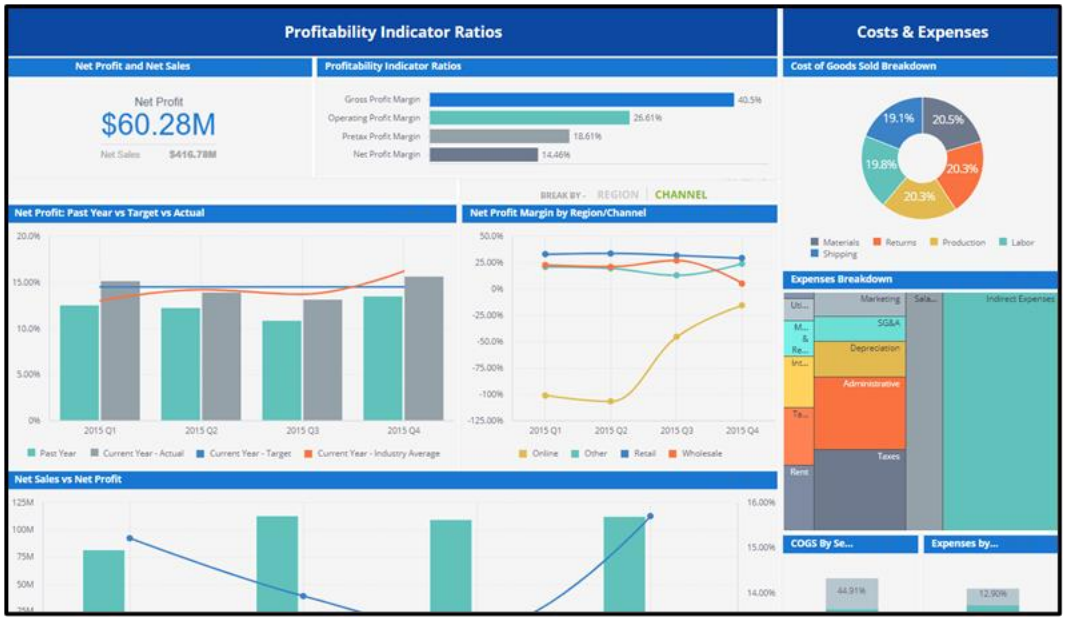

Figure 1: Dashboard example of a Descriptive Analysis (Cao et al., 2017)

2.2 Predictive Analytics

Predictive Analytics is able to intuit future consequences through past data. The probability of an occurrence is then prophesied based on outlining the variable quantities and mapping their relationships. For example, a guesthouse might investigate previous booking data to forecast top vacancy periods in order to target those times to fill rooms.

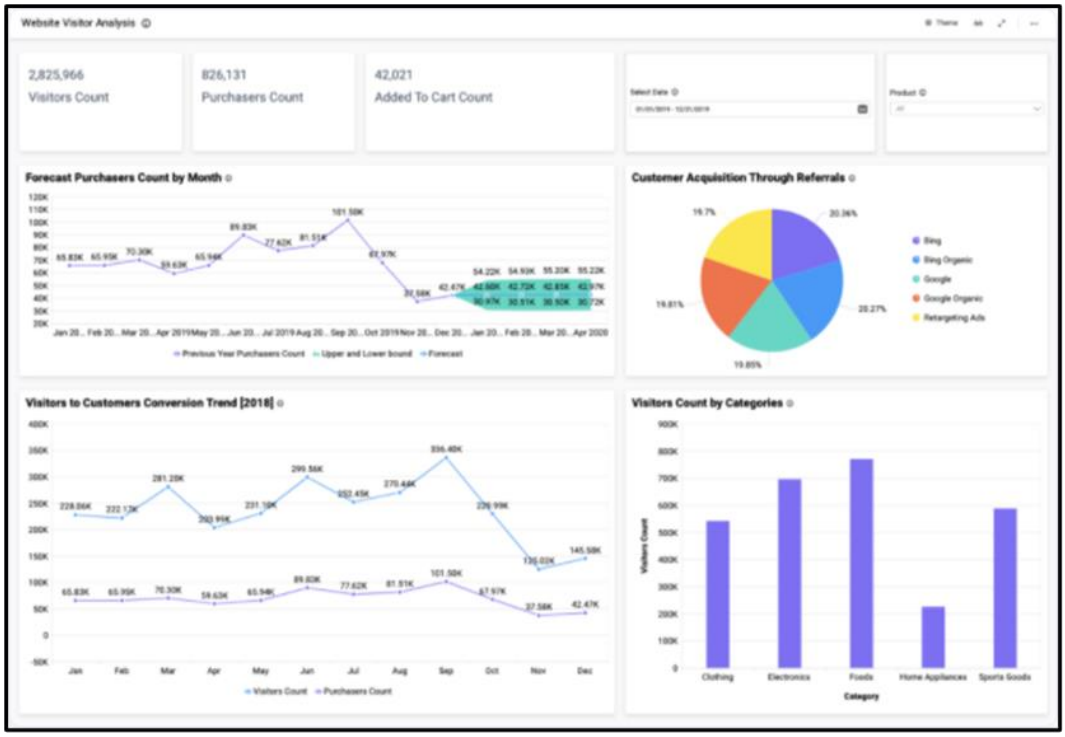

Figure 2: Dashboard example of Predictive Analysis (Deshpande et al., 2019)

2.3 Prescriptive Analytics

Prescriptive Analytics deals with the anticipation of what can occur, when it can occur, and the most predominant is the reason behind the occurrence. It is used to choose between the next steps for the right progression of accomplishment. Oil and gas corporations make use of prescriptive analytics to choose where to bore, enhance reserve abstraction and minimalize the effect the abstraction procedure has on the environment.

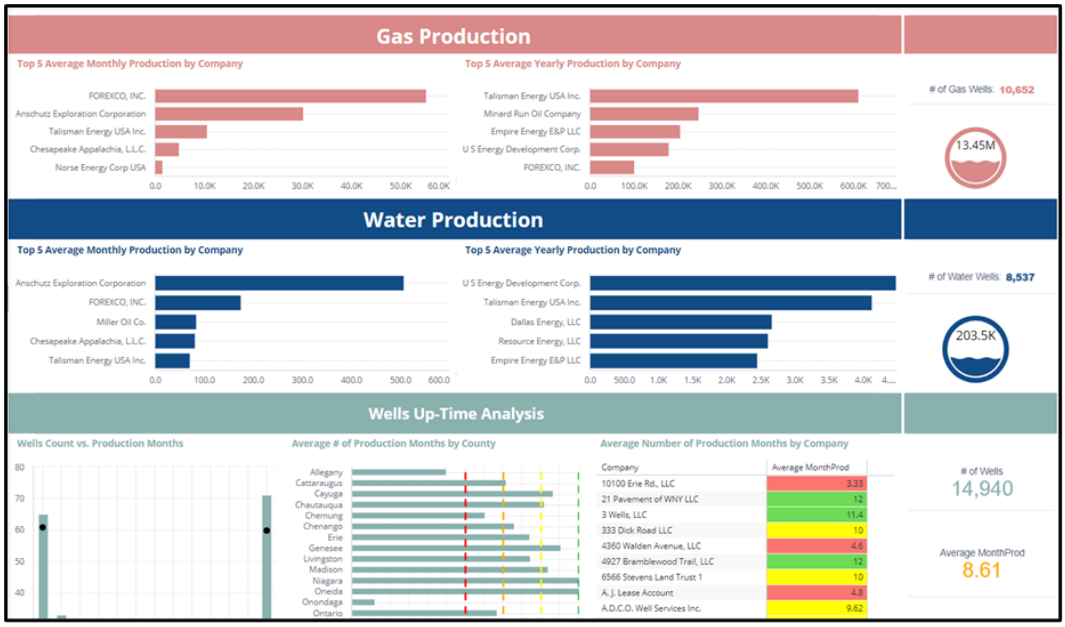

Figure 3: A dashboard exemplar of Prescriptive Analysis (Deshpande et al., 2019)

3. Use and Significance of Data Analytics in Different Industries

3.1 Healthcare Industry

As the average normal human lifecycle has increased over time, along with a growing worldwide population, data analytics focused on healthcare are a situation to make a huge impact in contemporary action. The usage of healthcare analytics has the potential to decrease medication costs, forecast epidemics, target avoidable diseases, and increase the quality of living of patients over a lifetime. Big data fundamentally receive massive amounts of data, digitalizes it, and then combines and investigates it through specific technologies. Through data analytics in the healthcare system, gathering medical statistics and adapting them into pertinent and cooperative outlooks becomes practically effortless. Data analytics helps in staffing and admission records, generating electronic health records, enhancing patient engagement, preventing opioid abuse, as well as providing a predictive analysis (Saranya et al., 2019).

3.2 Automotive Industry

Approximately 90 percent of newly launched vehicles have connectivity systems that will increase the use of big data analytics even further in automotive initiatives. The automobile industry is the largest industry that uses the benefits of data analytics to its fullest capacity. Big data analytics have facilitated the vehicle industry's ability to increase its competence in marketing and sales strategies. These days, electric and self-driving cars have the potential to entirely transform transportation. Data analytics was essential in the development process, from engineering to cultivating client awareness. Data analytics application includes connected car technology, supply chain management, automotive financing, designing, and production as well as predictive analysis (Kumari et al., 2020).

3.3 Supply Chain Management

Data-driven analytic methods are applied across diverse fields to empower the administration to appraise commercial performance as well as determine the extent of development. It also helps in optimizing commercial process administration through intellectual decision-making. Employing data analytics in supply chain management benefits administrations to increase their incomes through streamlined operative development. The usage of data analytics in supply chain management raises the practice of intellectual technologies, which include machine learning and artificial intelligence. Then, supply chain analytics incorporates capacity planning that defines the capacity of production in relation to alterations in demand. It helps in operation planning and sales, demand prediction, and business intelligence to gain past performance insights (Tiwari et al., 2018).

3.4 Social Network Marketing

Data analytics is social media is trending and is one of the foremost sources of information today. Information gleaned from social media provides insights to

understand the behavior and needs of consumer audiences. Demographics of age group, type of social media, and use cluster of each platform are automatically provided. This helps not only to attract more customers but also to understand competitors in the market. A better strategy can be created to stand out from the crowd, and data analytics shows the efficacy of social media campaigns (Karpurapu et al., 2017).

4. Business Success Stories Using Data Analytics

4.1 Netflix

The huge quantity of data gleaned from Netflix's millions of subscribers is molded into creating Netflix's recommendations, which are considered to be relatively effective in forecasting what viewers would like to see. The newest Netflix series is completely based on the data model, which keeps Netflix rated as one of the top streaming services (Van et al., 2017).

4.2 Coca-Cola

Coca-Cola gathers data on their customers to increase sales to existing customers as well as upsell new products, which reduces prices while at the same time increasing revenue. Customers share their thoughts about the product over social media, telephone, or through correspondence, allowing the corporation to align its strategies to best address customer demand. The data the corporation gathers is geared towards refining the brand and inspiring increased purchaser loyalty (Chu, 2020).

4.3 Marriott

Possessing nearly 6000 hotels in 122 nations, Marriott has discovered the key to remaining inexpensive is data analytics, which delivers data including the professions of guests and their household members. Data analytics permits the corporation to recognize positive categories of clients, which might include individuals interested in fitness or those who like to travel internationally, and then advertise the assets that attract such clients.

4.4 Amazon

Amazon's recommendation of products is so effective that it often seems it knows users better than they do themselves. This is the outcome of appropriately applied data analytics, which lets Amazon intuit the needs of purchasers according to their reviews and feedback, combined with search history. This inevitably makes Amazon one of the most successful brands in the whole world when it comes to customer engagement and experience.

4.5 Starbucks

Starbucks gathers data about the customer experience and their decisions through the mobile app and their rewards database. The database makes a pertinent recommendation based on a client's previous orders, considering date, time, and location along with

further relevant factors. Starbucks goes beyond competitors through the usage of big data to suggest superior offers that feel more applicable, whereas the supply chain has the technology to create modified evidence about each purchaser. Using data linked to traffic patterns and demographics, the Starbucks app detects popularity and provides insights to open a new store in a given location (Key et al., 2021).

4.6 Zillow

Zillow incorporates visual analytics to market local real estate to users. Even though users may not be familiar with the methods being used, Zillow uses incremental learning to teach buyers what they need to know step by step and ensures they can recognize elements incorporated into the "*visualization design choices*" because they are intentionally "*intuitive and simple*." This has led Zillow to be one of the top real estate sites, which many people frequent even when not currently looking to purchase a new home (Li et al., 2018).

5. Literature Review

While traditional marketing still holds its importance in most companies (and the larger chunk of the budget), digital marketing has been growing as the use of analytics allows digital services and website users can have a powerful impact on a company's bottom line (Järvinen & Karjaluoto, 2015). A person's online activity online can be viewed as a wealth of data that can be combined with other user information to determine trends and forecast future needs. As users interact with a website, objective data is generated through their conscious inputs, and the system also records other information automatically, which provides a massive amount of potential data to researchers that can be used in various ways (Xun, 2014). Weaver (2021) comments that "*in a range of industries, … there has been a shift from conditions of data scarcity to those of superabundance*." Analyzing the resulting "*enormous volumes of data*" allows a business to become more efficient and reduce uncertainty in their forecasts. However, with the benefits, companies must have a clear strategy to address the use of all that data and a vision for the future, or it is useless. There are also operational challenges to the use of the data, and more practically, companies must supply the technical demands needed (Mazzei & Noble, 2017). Merlin & Prem explain that "*traditional indexing and retrieval procedures are not suitable for the advanced dataset*" and new methods must be developed. Cloud computing allows the storage of these massive amounts of data and also the software and hardware support needed to interpret, process and manage that data. Sellami et al. (2020) point out that "*Considered as complex ecosystems, big services are constructed and delivered by reusing heterogeneous services (Web, mobile, cloud, mashups, data, etc.) from different domains across multiple cloud availability zones.*" However, when the technology lags behind the capacity of what the data could provide, "*available data often remain unexploited*" (Kozjek et al., 2020).

5.1 Big Data

Big Data refers to the enormous amounts of information being generated due to new technology advancement and internet sources. Munawar et al. (2020) conclude that "*data lies at the intersection of the storage, statistics, technology, and research fields*" and the "*major characteristics of big data can be summarized using the seven Vs, which include variety, volume, variability, value, visualization, veracity, and velocity*." They list everything from increasing customer satisfaction to improving disaster response as positive outcomes from the use of this data – truly, the possibilities seem without limit, if the information can be properly harnessed and extrapolated. The marketing aspects of big data have been explored in many sources. Big data is integral to customer satisfaction, striking a balance between "*cost and availability*" and always seeking for solutions to supply chain disruption and improving customer service in order to "*revolutionize modern supply chains*" (Boone et al., 2016). Kauffmann et al. (2020) explore how product reviews can be cross-referenced with price, brand, and category of product to identify fake reviews and limit their influence on consumer and company perspectives. Internet advertisements also influence user purchases, especially when it comes to products that are new to the consumer, but ad-blocking technology has limited their effectiveness and reduced customer search activities (Todri, 2021). All these trends are recognizable through studying the available raw information.

Data analytics can take these outputs of Big Data and present them in visual and graphic formats that make them easier to interpret (Chang, 2021). Pathak (2014) compares data visualization to a "*story*" that "*involves conveying relevant and interesting information at the right level of detail…so that the viewer can fully understand and appreciate the complete picture*." The data around the process and the environment can be used to support decision making, optimize output and increase efficiency (Chang, 2021). Google Analytics provides organizations "*a real-time overview of how consumers are interacting with their company-owned digital touchpoints*" which allows these customer insights to positively improve their experience (Holmlund et al., 2020). Google analytics is generally successful at predicting economic variables due to its large market share, which has the highest percentage of online searches in most European countries (Siliverstovs & Wochner, 2018). On a small scale, consider a subset of web analytics tools called "*click analytics*," which displays where users are physically clicking to interact with a website. Farney (2011) explains that the tools that provide this data can be used by libraries to identify high and low usage areas on a page and better tailor their services to the public. Cantabella et al. (2019) explore how data from learning management systems can "*aid both teacher and students in improving their educational goals*." On a much larger scale, visual analytics can help design intelligent transport systems and "*make safer and more efficient use of infrastructure*" (Lock et al., 2021). Geiger et al. (2018) posit that using digital innovation including "*Big Data, Cloud Computing, Mobile technologies and Social media*" could be the key to allowing Europe to make strategic decisions to bring growth to the economy.

Of course, the use of personal data is not without controversy and debate over the ethics of applying user data with and without user knowledge. Currently, there are few effective ways to "*copyright*" this data. Xu and Shi (2021) suggest there may be a way to

"*generate digital watermarks*" to protect the ownership of the data. This will be discussed further under the topic of healthcare in particular but is relevant in all sectors.

5.2 Internet of Things

Along with big data, there has been a move recently to what is referred to as "the internet of things" or IoT. For those unfamiliar with the term, it can be easily defined:
"The IoT is composed of three main parts:

1. *the 'things' (objects);*
2. *the communication networks that connect them;*
3. *the computer systems using data streaming from and to objects*." (Stergiou & Psannis, 2017).

This definition will be helpful in upcoming sections. Examples of the IoT include smart home technology and wearable tech that provides streaming biofeedback. However, despite much progress in this area, wearable tech that syncs to the user's smartphone is still separated from the "*main steps of (bio)analytical/diagnostic procedures, including mixing, separating/centrifuging, analyzing, and microscopy*" (Golmohammadi et al., 2020). Soon, however, there may come a time where the analytics are able to be performed within the smartphone app, allowing the user to get maximum feedback from their own data. Currently, this data is, which is also available to the developers, is often more meaningful to those developers or third parties.

6. Case Studies

Above is a brief overview of the uses of analytics in various business segments. Reviewing the current literature concerning these areas gives greater insight into just how much benefit analytics can have.

6.1 Analytics in the Real Estate Market

Consumers may find it difficult to have a working knowledge of the real estate market, even when they want to list or purchase property without the help of an agent due to the sheer number of factors that contribute to the value of a property. Sun et al (2013) explain that the data involved are "*high dimensional*" with "*complex spatial and temporal patterns*." Factors that can rapidly influence price include Shannon's entropy, which is simply the amount of information within a variable, as well as the associated images. Using property-related images showing indoor, outdoor, and satellite views Kostic & Jevremovic (2020) determined that "*image segmentation is the most important visual feature for the prediction of house lifespan*" and "*deep image features can be used to quantify interior characteristics*." Basically, visual data on a property can be analyzed using various techniques, which replace the need for a human representative. Essentially, the right website can give a real estate agent the advantage or even replace the need for an agent altogether. Sun et al. (2013) praise Zillow as "*A novel Web-based visual analytics system, which integrates state-of-the-art interactive visualizations to enable end-users to create their own visualizations and gain insight into the real estate market*." Zillow presents the available data

in response to specific queries, allowing the user to benefit from their algorithms and become knowledgeable about the local real estate market. The majority of homebuyers now use the web in some capacity for their purchase. Hand in hand with this search technology is 3D visualization, allowing them to see a realistic view of a property whether it is too far away to visit easily or hasn't yet been built in order to make buying decisions quickly and efficiently (Rakheja, 2018).

Due partially to low-interest rates, home buying soared from the end of 2021 into 2022, and home prices increased dramatically to meet this demand. For years, sites like Zillow, Trulia, and Redfin have recognized that the market value of homes may or may not end up being reflected in the final sale price and each has its own proprietary formulas to provide estimates. Factors such as size and number of bedrooms, the appearance of the property, and perceived luxury level can end up making the sales price highly inaccurate. Using analytics can offer better predictions than outperform even Zillow's estimates (Poursaeed et al., 2018). Seeing the rapidly rising prices that guarantee the bubble will soon burst, Agarwal et al. (2021) explain, "*A sustainable housing market is reinforced by having representative price indicators that do not neglect spatial heterogeneity and autocorrelation effects.*" The real estate market is interested in the highest possible profits, but "*The benefits of real estate investment depend not only on the quality of investors but also investment environment, for example, economic policy, social needs and market capacity"* (Wu & Kou, 2016). These things need to be factored in for long-term success. Demand in real estate, like many things, is a cycle, and analytics will be just as important when interest prices rise, and it becomes a buyer's market instead of a seller's market. Analytics can help market and presently available properties to their best advantage to ensure a relatively quick sale compared to other options.

6.2 Social Media: Analytics on Facebook and Twitter

One sector that stands on its own but also provides huge amounts of data and space for online marketing is social media. Facebook alone has billions of users, who click through terms of conditions that agree to provide aggregate data on their demographic characteristics, allowing for the study of the audience in many areas, such as gender gaps across countries (Fatehkia et al., 2018). Chan (2011) said they found it "*surprising*" how much information about Facebook users was being provided to advertisers and "*the extent to which Facebook tracks the activities of its users*," but they were comforted somewhat that this data is aggregated and anonymous. Facebook data can be used for targeted ads toward users. Predictive models are used to "*forecast future post engagement*" and evaluate marketing campaigns by comparing benchmarks against achievements (Kennedy et al., 2021). For example, users with certain "*likes*" in their profiles can be targeted for ads in a specific movie genre. Bogaert et al. (2021) studied a predictive approach where a model could predict whether a user would be interested in that particular genre from a simple yes/no survey question and theorized the possibilities of technology in this realm.

User data can be used for advertising purposes and profit, but it can also be used for philanthropic and worthwhile pursuits, such as inspiring sustainability and green living as part of a user's environment identity (Domalewska, 2021) and attracting new

users to libraries by converting them through their Facebook pages (Chen, 2011). Social medial sites like Facebook and Twitter are powerful tools. Davis et al. (2021) list some of these possible technologies. "*New digital technologies bring diverse public policy and social issues to the forefront, including those endogenous to the digital arena (e.g., social media addiction, fake news, cyberbullying, risks of the sharing economy) and those that have long existed but taken on new forms in the digital space (e.g., election rigging on Facebook, obesity insights from Uber Eats data, social media listening about adolescent smoking, geographic information systems revealing consumers' access to firearms retailers)*." They conclude that current analytics offers insights into modern society's problems. As with any tool, social media can be used positively or negatively. Twitter users' frequent utilization of hashtags in trending topics allows for text-mining of a trending subject to determine if feelings on the subject are overall positive, negative or neutral (Queiroz, 2018). Along with the negative use of data, these social media sites can also have associated addictive behaviors that negatively affect users (Shettar et al., 2017). With so much available information, it is important to consider the ethics of targeting users and a larger debate is forming over who actually owns an individual's information, especially when it comes to healthcare.

6.3 Analytics in Healthcare

Big Data applications are helpful across many fields, as demonstrated so far by the examples in this article. It also plays a role in healthcare, even more so in the last few years due to the Covid-19 pandemic. Available user data has also increased due to the use of wearable tech that employs sensors, which provide real-time user data through smartphone links. Asri et al. (2019) argue that studying this data to predict patterns is useless if it is not applied to human lifestyle in order to provide benefits that allow us to "*live easier and healthier*." The "*nowcasting*" of human behavior can detect, monitor, and predict future epidemics and outbreaks, according to Mavragani & Ochoa (2018), who wrote about the ability to use Google queries to address HIV and AIDS with pointed internet advertisements, organizing preventative events, and supporting the Health Care System by offering free testing to regions that are heavily affected. The amount of data now available presents opportunities for research and implementation and new skills are needed to supplement the traditional public health training of "*statistical principles, communication, domain knowledge, and leadership*" in order to reach maximum potential (Mooney & Pejaver, 2018). Both examples use data that the user has voluntarily provided or signed a user agreement about (whether they read it in detail or not) explaining how data from a smartphone application may be used. Lipworth (2019) discusses the use of existing medical records by a pharmaceutical company in order to assess the effectiveness of a medication it produces. Data uses such as this may protect individuals by making the study data anonymous, but it starts to raise questions of ethics if the patients have not specifically agreed to allow their health information to be used in this capacity and leads to a larger discussion of data protection.

6.4 Data Protection and Healthcare

The Internet of Things produces large data sets, and the Internet of (Medical) Things (IoMT) can be used to refer specifically to wearable tech devices such as Fitbits, fitness and activity tracking apps on mobile phones, and home and city censors that allow health and health-related user/citizen behavior to be shared. Corporate Wellness Programs used by firms such as Walmart and Target are ostensibly offered to increase the health of employees, but they can also mine employee information to determine which women might be pregnant, or at risk for diseases, such as diabetes. While the user's well-being is the goal, data controllers must recognize the trust of the user that sharing their information will not cause it to be used for unintended purposes (Laurie, 2019). With Covid-19, there is also the dilemma of "*access to intellectual property during a crisis*," Walsh et al. (2021) explain, as patent and copyright restrictions on intellectual property rights (IPR) may conflict with to release of information to the public interest. Data protection law "*provides legal protection to data subjects and limits the data controller, but generally speaking, allows the data to be processed for the benefit of public health*," while copyright grants rights to the database's owner, which can restrict access to this data (Birnhack, 2021). The example given by Birnhack on how data can be restricted is that, in a medical study, researchers want as much information as possible to rule out correlation for causation, but when data is de-identified, they may lose key information such as location or ethnic background, which could be relevant to the study outcomes.

In order to ensure the authenticity of data, there are three questions Abdallah et al. (2020) propose to quantify it:

- "*Who creates the data?*
- *"How were the data created?*
- *"How can the data be useful for the applications?*"

"*Data quality dimensions and characteristics*" measure the data against established criteria to determine its reliability. Abdallah et al. (2020) list them as:

- "*Completeness: The values of all single data components can be completed accurately. It determines that the appropriate details are rendered accessible in the details platform to achieve current and potential market objectives.*
- *Uniqueness: The data are recorded only once.*
- *Timeliness: Determine the time-period required for data acquisition, analysis, and usage to accomplish a defined business purpose. Failure to obtain the information in an acceptable timeframe can impair its usefulness for making decisions.*
- *Validity: The data validity is determined based on rules for the format, type, and range.*
- *Accuracy: Determine how the data fits the dataset. This metric is a test of how well the data represent the subject of the "real world," entity, or case.*
- *Consistency: There should be no contrast between the descriptions of two or more depictions of any subject*."

This answers the first ethical question of whether the data is relevant and provides quality information that decisions can be reliably based on. The second ethical question is the use of that data. Hegde & Hegde (2021) explain that "*health care systems need to be stored and streamed properly*," and processing that huge amount of data from medical

records, combined with internet and social media sites, and the explosion of hidden data "*gives significant information about healthcare business intelligence*." The ongoing debate will only increase in years to come as health technology increases. Certainly, the use of text messages and the ability to link data helped with Covid-19 once vaccination began, to schedule appointments, record reactions, and track the progression of infections. Many feel that much more could have been done to disseminate information and map cases. Any failure in this area is only a potential for improvement in the next crisis.

7. Future Prospects of Data Analytics

Data analytics is projected to fundamentally affect the means and mode of the worldwide standard of living currently and into the future. By now, the use analytics of analytics from technical devices is common when corporations make major decisions. Data analytics allows the creation of the impossible from any imaginable innovation. Most current organizations across a variety of fields are presently capitalizing on data analytics to preserve their customer base, expand into new markets and compete with market rivals.

Data analytics will play a significant role in the whole market worldwide in the coming years. It is our prediction that a time will come when analytics of data will be standardized as the data protectors. They will help in the preservation of data privacy and security, detect harm and provide probable solutions (Lv et al., 2017).

The Internet of Things (IoT) as discussed above, is poised for a marvellous evolution. Administration, investigation, as well as the safekeeping of huge quantities of data, both organized and amorphous data produced by IoT, will consume a bigger sector of the marketplace. Apart from that, Artificial Intelligence and Machine Learning will reach new heights where people will not relegate them to the same category as automation. The future of data analytics will likely see a huge development in cognitive analysis.

Various organizations will make use of data analytics to secure profits, which confirms the future scope and purpose of data analytics. The open-source resolution will advance significantly in the marketplace while the organizations simultaneously have the challenge to work toward data accuracy and safekeeping. The need for data scientists will increase the demand for data analysis (Bhattarai et al., 2019).

8. Conclusion

Every person is more than the sum of the data they provide, but the overwhelming amount of information that can be gleaned minute to minute has the capacity to translate into larger trends and predictions. Big Data continues to grow, and so too does the need for ways to store, interpret, and communicate that information in usable ways. Experts are needed across many fields to take the current statistical models and improve their usefulness, which is itself a growing trend for the hiring markets in future years. Having

some understanding of how data is used can help a person safeguard themselves from misuse of that data and also receive the most benefit from the data they do share.

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Conflict of Interest Statement
The authors declare no conflicts of interest.

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