

Business Intelligence and Current Trends



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Introduction

Technology plays an important role in our lives, and day by day is improving, innovating, upgrading and updating to make our daily task easier, from mobile phones to digital and virtual platform. When comes to business, is the key to the success door which can be open more easier using business intelligence.

As a part of my research today, I will guide you through business intelligence, how can be defined, how can help the business along with its current trends. Will be covered Mobile BI, Artificial Intelligence, Cloud Computing and its, models and services, Natural Language Processing and Data Literacy, what are they, what benefits and disadvantages can bring to the table, but also what impact can have on the business.

Later on, at the end I will conclude with my understanding of Business Intelligence Trends and their impact on business life.

What is Business Intelligence?



Figure 1 BI Made by Student Via Canva



Business Intelligence Trends-Mobile BI

Figure 2 Mobile BI Source: Made by Student via Canva

MOBILE BI is the process of transferring data, information from a desktop computer to mobile devices such mobile phones, tablet, smart gadgets in real-time or back-up in order to help speeding and easier decision makers in business, managers or owners or right department within the organization, can be a mobile app for employees, business metric dashboard, key performance indicators, training for new and existing employees, etc

. The Mobile BI is used even in real daily life, by individuals via apps as an example digital loyalty card used by customers of a retail shop or see their medical results. As technology is progressing daily, the use of Mobile BI has increased massively and shows many **advantages:**

- ✚ Offering real-time data about production, productivity, targets, sales, performance, statistics within the company.
- ✚ Key to decision making by allowing real-time data from any location at any time, monitoring existing and new customers, clients and their needs and wants of purpose to satisfy their requirements.
- ✚ The use of apps in order to offer company's employees and customers better information and be updated to the current decisions and changes.

Disadvantages:

- ❖ Storing too much data
- ❖ High Costs for large companies where IT skilled workers are required, and hardware *is also included*.
- ❖ Data leakage where error is shown, can erase or publish your data, users' data.
- ❖ Non quality data, due to much data storage, many irrelevant or useless data processed by MOBILE BI



Figure 3 Data (Source: Canva)

Business Intelligence Trends- Artificial Intelligence



Figure 4 AI (Source: Canva)

AI is the computerized technology that help people to operate and interconnect with machines, robots with it and computing skills to produce or execute operations which in old days was possible only by humans. AI is part of our life, not only in business, as an example of AI is voice assistant such as Siri, from Apple, Cortona from Microsoft, Google provided Google, Alexa by Amazon or Bixby by Samsung.

As an impact of AI in Business, provide physical and mensurable advantages to the human resources, flawless process of robotization, customer loyalty, product innovation and is used in different industries like healthcare, financial, automotive etc. and have the goal to ambition, expand cognitive faculty of humans to increase effectiveness.

Common uses of Artificial Intelligence

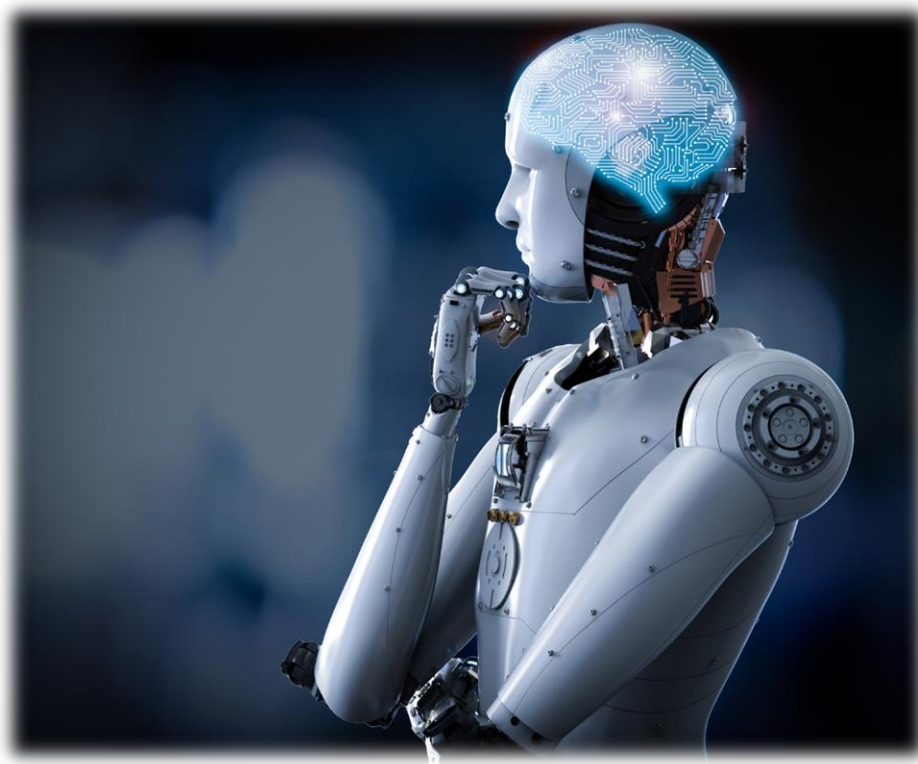


Figure 5 AI2 (Source: Canva)

- ⇒ *Machine Learning* become useful in systems which collect mass data such as smart energy systems which help the energy provider to decide based on usage.
- ⇒ *Cybersecurity* is the AI which helps a network system to monitor and detect a company's data and prevent and protect for potential or future cyberattacks or cyberthreats.
- ⇒ *Customer AI* service is the online or phone chat robot which guides to the right department or agent, helps, and answers to customers' requirements and improves their satisfaction and questions or bots used as a personal assistant to maintain and remind your business schedule, such as meetings or manage emails.
- ⇒ *Virtual and 3D business* plans and holograms can be used in meetings for a better and quicker decision and visualization of competitive advantages and competitors.

Business Intelligence Trends-Cloud Computing



Figure 6 Cloud Computing (Source: Canva)

Cloud computing is one of BI Trend being utilized by numerous corporate organizations and offers businesses a method of administering their resources digitally. This permits corporate entities to retrieve their information virtually, enabling data to be accessed at any time and from any location and also has a positive impact and at the same time, some challenges are faced by the business entities.

1. **Cost Cutting** -Cloud computing cuts down costs for the business since you only pay for resources when you need them, and it's based on usage.
2. **Scalability**- The primary advantage of cloud technology is that the customer has the capability to adjust resources according to the demands of their organization.
3. **Flexibility**- Customers or users are at liberty to determine which services they wish to utilize and remunerate accordingly.
4. **Provides Almost Unlimited Storage**-Although cloud computing has a positive impact, corporate entities still face some challenges.

5. **Disaster Recovery-** Businesses utilizing cloud services do not require intricate disaster recovery plans as the cloud service providers take responsibility for such matters and assist their clients to recover quickly.

Cloud Computing Models

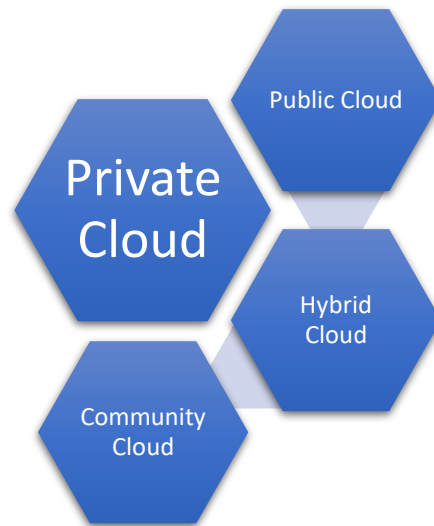


Figure 7 Cloud Computing Models (Source: Made by Student)

Cloud Computing Services

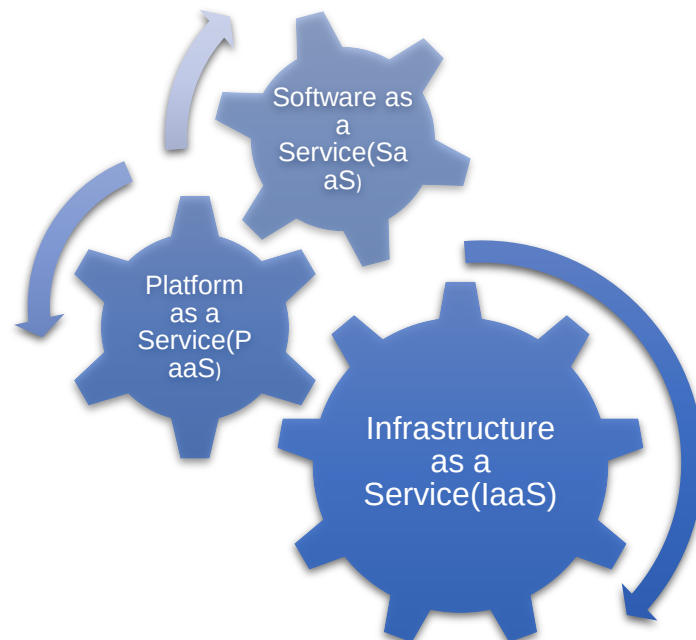


Figure 8 Cloud Computing Services (S: by Student)



Figure 9 NLP (S. Canva)

Natural Language Processing (NLP), a branch of artificial intelligence, is increasingly focused on improving impersonation by teaching computers to understand spoken language. communication, receive both textual and vocal streams as inputs; translate these inputs into a machine-understandable format; and comprehend the message's contents.

The purpose of this study is to analyze TripAdvisor texts that have not been categorized and search for evidence of sustainable transport modes such as walking, with the goal of positively influencing public services and businesses.

Benefits of NLP in Business:

1. **Immediate customer service -**
Businesses must recognize NLP tech, such as chatbots, for customer service..
2. **Boost your conversion rate -**
Machine Learning apps like chatbots & search can enhance user experience, helping to convert visitors into customers.
3. **Save money and time -** Cutting costs and time. Chatbot Magazine stats indicate 30% cost reduction in customer service by using NLP for automated tasks.
4. **Perform large scale analysis-** help with sentiment analysis on any scale, providing insight into the content/structure of documents, internal systems, emails, social media data, reviews or other sources.
5. **Understand your market -** NLP lets you analyse customer language, allowing segmentation.

Business Intelligence Trends-Data Literacy

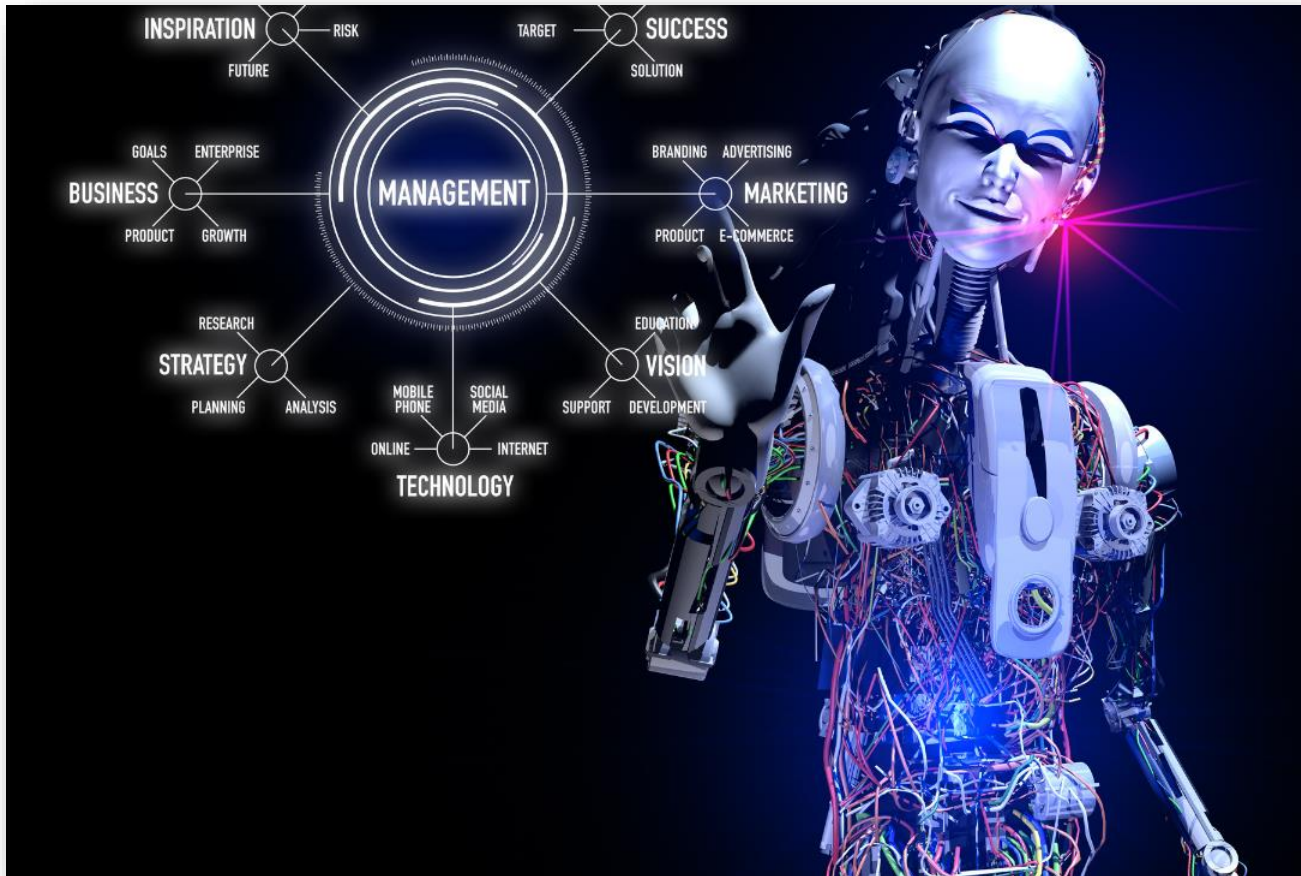


Figure 10 AI3 (S. Canva)

An individual possessing data literacy is equipped with the necessary capabilities to comprehend, investigate, utilize, make decisions concerning and communicate through data. Acquiring literacy also necessitates the cultivation of data-driven critical thinking and developing the necessary capabilities to bring that about. It is essential that we cultivate the ability to think analytically, support our arguments with facts and figures, and identify pertinent data; for the outcome of our decisions and investments will be contingent upon it. Without a workforce that is proficient in data literacy, organizations restrict or impede their capacity to construct an effective Data Culture and draw value from their data.

Possessing a workforce that is well-versed in data literacy has numerous advantages, as it allows enterprises to maximize the potential of existing technology platforms for analytics and to accurately evaluate analytical necessities across various business divisions prior to introducing novel tools.

Conclusion

As end of my research I understand that Business Intelligence is essential in decision-making and is the key towards a successful business and happy customers.

Moving down to the BI Trends, my understanding and learning is improved on how can help the business along with its current trends: Mobile BI, Artificial Intelligence, Cloud Computing and its, models and services, Natural Language Processing and Data Literacy, what are they, what benefits and disadvantages can bring to the table, but also what impact can have on the business.

Technology will be innovating every day, so it is important as a business to be up to date and be clear on affordability within your business.

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