

BA (HONOUS) BUSINESS MANAGEMENT (February 2023 Term)

Data Handling & Business Intelligence- LCBB5000

Assignment- A1- Current Trends of Business Intelligence

by Constantin Gabriel Tacea (2122369)

Lecturer:Amitave Banik

Contents

INTRODUCTION.....	3
IMPORTANT BUSINESS INTELLIGENCE TRENDS	3
Data Security	3
Cloud Adoption	4
Artificial Intelligence	4
Data Quality	5
Data Discovery	5
CONCLUSION	6
FURTHER RECOMMENDATION	6
REFERENCES.....	7

INTRODUCTION

Nowadays, running a business requires more than just dedication and investment, thus it is essential to adapt to Business Intelligence.

What is Business Intelligence and why should we integrate it in our company?! The development of a company is based on Business Intelligence, because it provides the opportunity to create the ideal context and to collect and generate vital business information. It is a method and practice that helps the company to better collect, analyse and evaluate resources and factors in order to make decisions easier and faster.

With technological development and new trends more and more companies understand the need for Business Intelligence and for implementation of current tendencies in: security, artificial intelligence, cloud for data and analytics, data discovery and quality.

In this report we will discuss each trend and the importance of implementing them in any company.

IMPORTANT BUSINESS INTELLIGENCE TRENDS

Data Security

To begin, I would like to present Data Security, because it is vital for companies to protect their data.

Technological development has brought numerous benefits as well as a significant increase in cyber-attacks. For this reason, it is crucial for all types of companies to implement security systems.

Following a research study IBM X-Force Red stated that due to 2020 pandemic and the shift to remote work, the risk of cyberattacks increased as people worked from their personal devices and networks while being unprepared for this significant change that put companies' data at risk. "Security concerns may forestall the direct sharing of information and how these different gatherings cooperatively direct data mining without penetrating information security presents a challenge." (Azevedo, 2021, p.12)

The ideal solution for keeping data secure is to implement full encryption, data control and threat detection, and the main trend that meets all criteria is cloud for data and analytics adaptation.

Cloud Adoption

Business Intelligence is defined by the cloud for data and analytics. After 2020 more and more companies have decided that the time has come to move their data and operation method to the cloud, because it's more secure and easier. By 2023, cloud adoption is no longer optional but necessary, because it enables faster and clearer analytics and helps face competition.

NTT Ltd. estimates that there will be investments and the global cloud analytics market will grow from \$2.6 billion in 2022 to \$5.6 billion by 2027. Market growth is fueled by the need to prevent cyber-attacks, enable efficient analytics, manage real-time information, and the ability to make accurate decisions quickly.

The issues reported by Turbonomic in 2021 were that there may be barriers to transferring certain applications to the cloud and limitation on the freedom to share information - given the enhanced security of the systems. However, cloud adoption is helping companies to evolve and support artificial intelligence.

Artificial Intelligence

Digital Domain Holdings Limited, a company that specializes in visual effects and virtual human technology, takes artificial intelligence as self-evident being the basic focus of a company, but the significant increase in revenue in 2022 compared to 2021 of over 11%, shows an upward trend on openness to technology and artificial intelligence.

Artificial intelligence and the adoption of software in companies has a positive impact on all industries and departments because it simplifies work processes, reduces work time, and improves data collection and distribution. For instance, in research, Poolbeg Pharma Plc, a biopharmaceutical company, has integrated AI software into their research to analyse unique disease data from human-tested samples, and in November 2022, just nine months after the project began in February 2022, several types of respiratory Syncytial Virus drugs were developed and thus the foundation for an artificial intelligence model of the influenza virus was laid.

In the long term and in the future, artificial intelligence is expected to grow and develop in such a way that it will go beyond the limits imposed by software algorithms and it will be possible to make decisions only through Artificial Intelligence- Business Intelligence, with high clarity and quality of data.

Data Quality

Every company collects data about: customers, competitors, products, processes, services and suppliers, which is beneficial for the proper functioning of organisational management and decision-making.

Accurate data is crucial for the efficient functioning of a business.

Quality management has grown in importance and is currently managing a precise, unique and accurate set of data that improves the company's business.

According to an IBM study, estimated that poor-quality data costs US companies \$3.1 trillion annually due to a multitude of bad data.

Business Intelligence involves accurate, clear and quality data collection, which is a source of increasing profitability and handle competitors.

Quality is given by several factors, such as:

- complete data being;
- data being current;
- data not being repeated;
- data being consistent;
- data being timely.

All this impeccable data represents Business Intelligence and helps management in making the right decisions.

Data Discovery

In “Integration Challenges for Analytics Business Intelligence” quote from Gartner Group and defines data discovery “a next-generation data discovery capability that provides business users or citizen data scientists with insights from advanced analytics.”(Azevedo, 2021,p.146)

Just as data quality influences the smooth running of the business, Data Discovery is one of the main trends stating with 2020 and it is expected to continue growing in 2023 as a process dedicated to data preparation and analysis.

Data Discovery helps companies to combine the preparation of information with data analysis and consumption. It's an important trend in Business Intelligence because it helps staff without IT skills develop and understand data. By combining data discovery with other trends, businesses can take decisions quickly and accurately, improving productivity in their companies.

CONCLUSION

Anil K. Maheshwari tell in “Business Intelligence and DataMining” (2015) “Data mining is a multidisciplinary field that borrows techniques from a variety of fields. It utilizes the knowledge of data quality and data organizing from the databases area. It draws modeling and analytical techniques from statistics and computer science (artificial intelligence) areas.” (Maheshwari, 2015, p.45)

The pandemic has accelerated companies' focus on Business Intelligence and adapting the trends. This report has outlined 5 of the most important trends, vital for increasing productivity and profitability.

Since 2021 Business Intelligence has evolved and demonstrated the significance of data security, clarity and quality that are necessary to implement Artificial Intelligence and to provide a cloud for data and analytics. Currently, companies are adopting and are increasingly open to adapting to trends regardless of the domain.

FURTHER RECOMMENDATION

The hot Business Intelligence trends include automation, digitization, security, quality and transparency, and for 2023 and in the long term, companies need to pay attention to the market trends and implement them, as they can cause big changes in the way of doing business and eliminate competition.

By integrating Business Intelligence and the most important BI trends, the goal is to improve economic performance and to have a major impact on strengthening social and environmental performance in the current business dynamics.

REFERENCES

- Ana Azevedo, 2021, Integration Challenges for Analytics, Business Intelligence, and Data Mining
Available at: <https://www-igi-global-com.ezproxy.uwtsd.ac.uk/gateway/book/253124>
[Accessed: 1 April 2022]
- Anil K. Maheshwari, 2015, Business Intelligence and Data Mining
Available at: <https://web-s-ebshost-com.ezproxy.uwtsd.ac.uk/ehost/detail/detail?vid=0&sid=e25658ec-73b1-4876-af31-0ad43e28b2f1%40redis&bdata=JnNpdGU9ZWwhvc3QtbGl2ZQ%3d%3d#AN=935070&db=nlebk>
[Accessed: 1 April 2022]
- 7 Business Intelligence Trends to Watch Out For in 2022 (analyticsinsight.net), online,
Available
at: <https://www.analyticsinsight.net/7-business-intelligence-trends-to-watch-out-for-in-2022/>
[Accessed: 1 April 2022]
- 11 Business Intelligence Trends for 2023: Latest Predictions You Should Be Thinking About –
Financesonline.com, online, Available at: <https://financesonline.com/business-intelligence-trends/>
- Digital Domain Reports 2022 Results, online, Available at:
<https://www.prnewswire.com/news-releases/digital-domain-reports-2022-results-turns-to-positive-ebitda-of-media-entertainment-business-segment-driven-by-record-revenue-in-30-years-of-the-business-and-laser-focus-on-core-vfx-business-301786811.html> [Accessed: 2 April 2022]
- Half of remote workers lack a clear data handling policy, finds IBM, online, Available at:
https://advantage-marketline-com.ezproxy.uwtsd.ac.uk/News/half-of-remote-workers-lack-a-clear-data-handling-policy-finds-ibm_215351 [Accessed: 1 April 2022]
- NTT launches scalable, cloud-native Managed Detection and Response security service,
Available
at: <https://services.global.ntt/fr-fr/newsroom/ntt-launches-scalable-cloud-native-managed-detection-and-response-security-service> [Accessed: 2 April 2022]
- Poolbeg Pharma : Results for the year ended 31 December 2022 online, Available at:
<https://www.londonstockexchange.com/news-article/POLB/results-for-the-year-ended-31-december-2022/15896953> [Accessed: 2 April 2022]
- Yu Yin Lim and Ai Ping Teoh, 2020, Realizing the strategic impact of business intelligence Utilization, VOL. 36 NO. 4