Databases and Business Intelligence Assignment

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Examples of businesses: using databases and business intelligence

Amazon - used to track demand for products and trends that are occurring.

Facebook- used to recommend content to users as well as help people connect with others.

Netflix- used to recommend shows or movies to each user.

Google - databases store user information in order to provide meor educated search results based on what the user has recently been looking up.

UPS - stores information about users in order to track packages as well as create optimal routing for drivers.

Reasons why businesses use databases and business intelligence

Businesses make use of databases as well as business intelligence in order to be more efficient and compete in the market. Databases and business intelligence can help companies in a wide range of ways.

- Data management/ data integration - Databases allow companies to easily access data in a more organized format. This makes it easier for them to do research on the market. This data can be integrated together in order to see the details about each part of the business.
- Forecasting/predictive analysis - Can be used in order to predict trends or see how the market might change based on the past years.
- Risk management - Helps notice changes in the market that could impact the company or hinder operations.

Effectiveness of businesses using databases and business intelligence

It is clear that companies that have extensive databases have an advantage over smaller business. Looking at Amazon or Google this is clear. It is hard for any company to reach their level or surpass them due to the amount of data they can collect as well as business intelligence they have. Additionally, Amazon and Google have reached a level where they can offer business intelligence services to other business. This is what allows Amazon and Google to remain at the top. It forced other companies to rely on the companies at the top.

Pros and cons of businesses using databases and business intelligence

Pros

- Enhanced Customer Experience - can create a better UI based on data that is gathered.

- Competitive Advantage - have the advantage against companies that don't make use of B.I. or databases.
- Improved Efficiency
- Informed Decision /Strategic Planning

Cons

- Costly Implementation

- Integration Challenges

- Security Concerns - could be targeted by cyber attacks due to storing large amounts of data

- Privacy and Compliance - have to protect user data and meet compliance

Profits generated by businesses using databases and business intelligence

Amazon has used business intelligence and databases to offer many different cloud computing hardware and software to companies. In 2018, NASA signed contact with AWS for 65 million for various features.

Google created the Google play store which allows game creators to put their games in a central database. This allows Google to take a percentage of the money from sellers that take place on their Google play store. - 42.3 billion dollars in annual revenue occurred in 2022.

Costs of businesses using databases and business intelligence

There are a lot of financial cost when first implementing Business intelligence or databases. Most of the cost upfront require companies to acquire hardware/software licensing. Storing data can also cost a lot for company ies due to the amount of data the collect. It can cost $40,000 to maintain a database

Amazon spends about 24.4 billion in infrastructure primarily going to AWS.

Results of businesses using databases and business intelligence

Companies that have implemented databases and business intelligence have allowed themselves to better understand the market. This allows companies to predict the market and adjust prices based on demand. Amazon and other top companies have wide range of information and data that is stored to help in this goal. For instance smaller companies can implement business intelligence easier now due to the availability of resources out there that offer subscriptions. This can be through AWS or other companies. Overall, while larger companies still have an adavagnatg over smaller companies. Smaller companies are able to implement databases and business intelligence easier than they could years ago.

Your opinions on businesses using databases and business intelligence

In my opinion it makes sense why business have adopted databases as well as made use of business intelligence. BI can offer companies valuable information that can be used to improve their products or service. This can help them make more money in the future.

Overall, the only concern with databases it that companies can gather rather confidential information about users which subjects them to being target for a breach. This is concerning because users don't have much of a say when it comes to data collection and rarely know what data is being gathered.

Your ideas for improving the way businesses use databases and business intelligence

I think that that companies should implement better policies around what information can be gathered. This will ensure that companies aren't just gathering useless information which ends up costing them money since it won't be used. Additionally, making a clear policy would allow users to feel better about what the company is doing with their data. One major shift that companies are making is adopting cloud based service. This can be a good thing for many companies because it would save them money due to the benefits of cloud computing. Such as- scalability and flexibility.

The future of businesses using databases and business intelligence

With the development of AI and machine learning in the past couple of years. It is likleky that companies will start to make use of AI and machine learning to aid in completing task. This can result in a more efficient system. For instance AI would be able to gather data at a more effinect rate and present it faster than a person could. This would impact a business because it could make process faster allowing them to make profits due to being ahead of other companies.

AI could also sort taught data determining if the data is worth gathering or not. Which would reduce the amount of redundant data that is being gathered.