

Short Essay on Big Data Opportunities and Risks

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The big data hype is here to stay and there are a lot of big opportunities where companies can take advantage of. But what are these opportunities? Do they carry some risks? Richard Benjamins, director of Business Intelligence at Telefonica Digital, answers both of these questions and explains the role that Europe should take in the field of Big Data.

Volume, variety and velocity are the three v's that define Big Data. But what is Big Data? We can define it as a field that deals with data sets that are either too large, too complex or both too to be handled by traditional tools. These data sets are increasing exponentially and it is estimated that every day we create about 3 quintillion bytes of data. But the price to store and treat these data sets is decreasing and this creates a lot of opportunities in sectors such as health care, public administration, smart cities and others. However, these opportunities can generate some risks too with the way that we protect data being the biggest one.

Social media is the classic example of where Big Data sits, but we can find it also in web logs, network data and transaction data. These types of data are growing and it is here that the big opportunities stand, as we should look into how expensive it is to extract this data, how can we treat it and how can someone take advantage of it. The way that we use this data can be divided into four models. The two most common ones are used in companies like Amazon, Ebay, Facebook or Google and consist on using the data to improve the business or using the data to improve advertising allowing to target more users. The third model is a real new concept that consists in using the insights that you generate from data instead of using the data itself, and this can be used for instance in smart cities (traffic management, illumination, garbage collection, etc). And the last model is still in the beginning and consists on protecting the data of customers in terms of privacy.

Privacy is the main risk in this field and a big event (like the one that happened in the nuclear sector) should be avoided at all costs to prevent the collapse of Big Data industry. Nowadays there are a lot of regulators that inspect the way that companies handle customer data, but small scandals still happen around the world. This happens also because there are still no concrete guidelines defined in the field of Big Data and public opinion and legal opinion tend to clash sometimes. These risks can be mitigated

by improving transparency over customer data and this is achieved through disclosing which data is being stored, for how long and what for.

With this lecture is easy to understand that are countless ways in which we can take advantage of Big Data to improve our business or even start a new one. Europe should grab this opportunities to grow in the technology sector, because it's still far behind countries like the USA. This is caused because there are no big companies in Europe due to countries limits and policies, and also because the finance of startups is still very weak. But this opportunities carry some risks and with the new General Data Protection Regulation in action privacy became a very important topic, especially in the field of Big Data where additional cares should be taken.