

Business Intelligence at Uber
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Introduction

Business Intelligence (BI) makes use of methods, processes, and technologies that help organizations to collect, store, report, and analyze business data for purposes of facilitating decision making. Institutions of higher learning are going through a period of transformation as they become digitalized to make them competitive like other organizations. There is need to adopt technologies to improve the quality and efficiency of delivering study processes and enhancing the experience of students. Furthermore, learning institutions need to attract and retain students to sustain higher graduation rates (Deng, & Chi, 2012). Thus, business intelligence can help the management of higher education institutions access and utilize relevant and timely information to make decisions that can help improve key performance indicators.

Historical Background of Business Intelligence

Technology has become a major determining factor for the survival of organizations across the globe. However, the impacts of ICT can only be realized through human intervention. It is essential for organizations to monitor the changes in technology. Furthermore, organizations should train and encourage their employees to be innovative because innovation impacts all organizational aspects (Deng, & Chi, 2012). When new technologies are implemented in organizations, the aspects of operation undergo major changes. One of the major challenges facing organizations is the management of the radical changes in technology. The level of innovation usually determines the competitiveness of organizations. Organizational technology is comprised of knowledge, skills, procedures, and physical manifestations like tools and machines.

The impact of technology that is currently undergoing rapid changes has resulted in the need for the employment of skilled workers. Upon joining an organization, these workers should

be motivated to be innovative to enable the organization to adhere to the technological changes. The ability of an organization to create wealth and improve the wellbeing of workers is determined by the level of technological development (Deng, & Chi, 2012). Technological changes have had massive impacts on organizations across the globe. The digital technology has integrated the world; thus allowing organizations to manage their communication channels.

Currently, the internet has experienced a tremendous increase in terms of usage. The internet has a significant effect on how and why people work. ICT has a major influence on the educated, ambitious, and skilled people. Because these people are the ones occupying important positions within the hierarchy of organizations, they play a significant role in the success of companies. ICT in combination with the internet support the process of employee recruitment. For example, the use of ICT in the process of recruitment results in cost savings because it eliminates the costs that could be incurred in data processing and the printing of announcement letters for vacancies (Deng, & Chi, 2012). ICT also results in improved efficiency of recruitment because it results in a quicker process; that is, from the process an employee is selected to the process he/she begins performing the assigned roles. Furthermore, ICT enables organizations to attract more and better candidates because if vacancies are posted online, they can be spotted by both the employed and unemployed candidates. Evidence from several countries suggests that ICT revolution is biased to skills (Hsinchun, Chiang, & Storey, 2012). The use of ICT increases the probability of hiring highly skilled workers, and this leads to improved organizational efficiency.

ICT skills are essential for the navigation of the current world, which has a complex nature. This is evidenced by the observation that the production of goods and services within societies with efficient ICTs are shifting to developing countries from the developed countries.

The rapid development of ICT is evidenced by the occurrences in China, South Korea, and India. ICT does not only affect the roles assigned to employees. It also affects the organizational environment and the social universe (Chaudhuri, Dayal, & Narasayya, 2011). For instance, with teleworking, the geography of work has been changed because it has changed the previous order of moving workers to work and replaced it with moving work to others.

Business Intelligence is a technology driven operation to analyze the data and provide practical information to help corporate officials, business managers, and other end-users to make more au courant business decisions (Deng, & Chi, 2012). Business Intelligence includes a type of tools, enforcement and methodologies that enable community to gather data from inside systems and outside sources, and the preparation for analysis, produce and run request versus the data, design reports, pictures, and data visualization to make the analytical effects available to resolution makers in companies as well as operational workers.

How Uber Uses Business Intelligence

Uber Technologies Inc. commonly known as Uber is a leading online transportation network firm with its headquarters located in San Francisco, California. The company develops, markets, and runs its software application, known as the Uber App, which allows users to request car and book taxi transportation and food delivery through company's mobile app and its mobile website platform (Deng, & Chi, 2012). Through the app, the company allows its drivers, working

as partners, to earn extra income from delivering food or transporting passengers to their destinations. The drivers use their own personal cars to conduct the business.

The company is a pioneer in the sharing economy, where it uses technology to enable users to access rides from within their vicinity. Thus, technology is a very important element in the company's business model, where it leverages the use of business intelligence to make crucial decisions to improve its business operations. Some of the most effective ways the company uses business intelligence include surge pricing and its rating system.

I. Surge pricing

Surge pricing is a business practice, which allows companies to increase their product prices when the demand increases. This allows the company to continue offering its services to those customers who are willing to pay more to get quality services when the demand is high. Furthermore, surge pricing also ensures that the products and services of the company are always available and reliable at all times for the customers who need them the most. Surge pricing is an important element in the pricing model of Uber (Hsinchun, Chiang, & Storey, 2012). The company charges its taxi fares using time, rather than distance. Therefore, it has developed a specific algorithm that allows it to manage fare prices by increasing the fares when the demand goes up. When there is a poor traffic or when the demand for taxis goes up, the prices rise up while the prices reduce significantly when the demand goes up. This ensures the drivers continue to make sustainable profits when the demand goes up.

II. Rating system

Uber also uses an elaborate rating system that allows users to rate drivers as well as the drivers rating customers. This helps to maintain trust and between the company, drivers, and the customers. With this rating system, the drivers with the best ratings get the most work, while the

users with the most ratings also get the best drivers to work with (Deng, & Chi, 2012). Through gathering this data, the company is able to make important decisions to improve the quality of its services.

The Advantages of Business Intelligence

There are various advantages of business intelligence. The first one is convenience and time-saving. Shopping online using the internet gives shoppers convenience because shoppers can shop while at their home and this is the prime source of convenience (Chaudhuri, Dayal, & Narasayya, 2011). The internet operates for twenty-four hours seven days a week, and its access is not limited to a geographical region. Shoppers can browse the internet and shop anytime they wish. As shoppers, consumers can also make purchases from other taxi drivers across the globe. With business intelligence, there are no surly clerks, panhandlers, and store lines that rob people of convenience while shopping. The studies that have been conducted on business intelligence have revealed that most people prefer shopping online because of convenience.

The second benefit of business intelligence is that it acts as a powerful instrument for research as consumers perform their shopping activities. For products like books, videos, and CDs, purchase decisions are influenced by customer recommendations and reviews. With the reviews, it is possible for taxi drivers to determine the best selling products and those that are not attractive to consumers (Deng, & Chi, 2012). They can use this information to determine the stocks that they should invest more in and the ones that they should not invest in. Studies have revealed that the consumers with internet access use it to gather information concerning products before making purchase decisions. Even the people who shop at physical stores use the reviews provided by online shoppers as the major determinants of their purchase decisions (Chaudhuri, Dayal, & Narasayya, 2011). This implies that the internet can act as a supplement to the brick-

and-mortar method of taxing. The ability to shop, research, and view purchase recommendations through the Internet has empowered customers and influenced their purchase decisions in positive ways.

Business intelligence is also beneficial when the products sold online are not available in the physical stores. Standardized products have to be put into consideration when making a decision to purchase online. The key reason is that uncertainty in the quality of the products is absent, and no pre-trial is needed (Deng, & Chi, 2012). On the other hand, products requiring personal experience are less likely to be shopped online. Furthermore, if a customer has a bad business intelligence history, he or she is not likely to purchase a product online even when the product is not sold at the physical stores. However, the major advantage of shopping online is that most products have the information that consumers need to know before making purchase decisions. Some of the information includes the risks involved, entertainment, enjoyment, and payment terms and condition. High levels of privacy associated with business intelligence also influence most people to shop online.

Finally, business intelligence considers the situational factors of consumers. For instance, the consumers lacking mobility cannot travel to shop at physical stores and as a result, they consider business intelligence as the prime way of accessing the items they need (Chaudhuri, Dayal, & Narasayya, 2011). Lack of mobility among consumers can be due to sickness or disability. Furthermore, for those people that do not live close to taxi stores, business intelligence acts as the best alternative that enables them to acquire the items that they need on time. Business intelligence also enables shoppers to compare vendor prices and make the best purchase decision based on the price factor. Just by viewing the websites of vendors, shoppers can easily obtain and compare prices. The wider reach of information provided by navigator websites like

autobytel.com also assists consumers in making the shopping decisions. In fact, most consumers prefer shopping online because of the lower prices.

Change to the taxi business model brought by technology

A business model is important for the success and growth of a company regardless of the industry of operation, size, or the products and services offered. For a player entering the market, it is important to develop a clear model of a business idea. The advancement of the old business idea is stressful for taxi drivers because people are always resistant to change. If a business idea is successful, managers are likely to be reluctant in changing the logic of how to create value. It is important to understand that success in the past does not automatically guarantee profitability in future (Deng, & Chi, 2012). The key reason is that markets experience changes such as the shift in the expectation of customers and taxi drivers have to keep the pace.

In the taxi industry, innovating the business model is a necessary ability of managers because it enables organizations to adapt to the external market forces such as the rising in the pressures of competition, the shift in economic power, and the ever-changing tastes and preferences of consumers (Chaudhuri, Dayal, & Narasayya, 2011). As decision makers, managers should be innovative with their choice of business models because this is the key determinant of how an organization operates and the values to be accrued. It has been argued that the key determinant of organizational competitiveness is the impact of technology on the business model of companies.

Innovation in the business model puts the managers of taxi companies in situations in which they compare the costs of innovation and the benefits by considering four factors. The first factor is how the business of the company has been done in the past. The second factor is how to improve the business performance henceforth (Hsinchun, Chiang, & Storey, 2012). The third

factor is the types of resources, expertise, skills, and technology that need to be sourced to push the business forward (Deng, & Chi, 2012). The final factor to consider is how the new business model is likely to impact the competitive position of the organization and how the competitors are likely to react.

The four factors set the managers of organizations in positions where they have to ask themselves several questions concerning the factors. Even though effective answering of the questions can prove to be a difficult task, the important pre-condition is developing perspectives based on the current business model of a company (Deng, & Chi, 2012). This has the potential of shaping the thinking of managers concerning how to move the business model to a new level of value creation instead of considering specific products or processes alone. The innovation of a business model can be associated with the development of new products, taking of new time costs, and dealing with uncertainties concerning the success of the products and the return on investment.

Conclusion

In conclusion, there is need to adopt technologies to improve the quality and efficiency of delivering business processes and enhancing the experience of consumers. Thus, business intelligence can help the management of Uber and similar organizations access and utilize relevant and timely information to make decisions that can help improve key performance indicators. Business intelligence incorporates several related activities such as online analytical processing, data mining, querying, and reporting. Therefore, business intelligence can go a long way in facilitating decision-making processes, identifying new opportunities for business, and efficient cost management. As time goes by, the more the number of people and organizations relying on wireless information systems.

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