RUNNING HEAD: BUSINESS AND MANAGEMENT

Investigating a Digital Disruption

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# Introduction

Disruptive technology is a technology that changes the face of innovation and impacts business models. In the past few decades, rapid evolution in modern technologies has created a paradigm shift in the business operations and upsurge the room for digital disruption (Schmidt and Cohen, 2010). Some instances of digital disruption are Siri in Apple and driverless cars. A technology which is not disruptive, in most cases it’s going to be something that’s not new and has been seen or heard of before. However, disruptive technology, in most cases, would be a groundbreaking innovation (Thirgood, and Johal, 2017.). Something new and amazing that gives birth to new standards. For Example, Flat-screen television was a disruptive technology now almost every television or a monitor is flat, Touch screen phone was a disruptive technology almost every phone now is a touch screen, same with Tablet PCs etc. This paper seeks to explore a company Textio, known for employing Artificial Intelligence technology followed by an analysis of the impact and future challenges and opportunities.

# Section 1: Business Background and Technology Used

Textio is a Seattle-based startup; the company is credited with the invention of augmented writing (“Textio,” n.d.). It is the form of writing supported by outcomes data in reality. It is based on the idea that if every time one writes something, they already know who will be responding, what if someone knows the reason why someone would respond. It is about knowing that what aspects of writing will be getting high rates on email, what text in the language will lead to the right applicant applying against a job post. It definitely changes the way one does business through writing and the use of words. Textio emphasizes that our words reveal us, the way one writes build a perception about them. Moreover, words have the power to change the future, thus writing in the best version is about creating the best version of themselves. The company is headquartered in 5th Ave Suite 2300, Seattle, WA 98104, USA, and it was founded on Sep 25, 2014, by six investors. A number of people employed by the company are 101-250. It uses 15 tech-based products such as Google Tag Manager, Google Analytics, and Vimeo. Its current funding is $29.5M, and this total funding was raised in nearly three rounds (“Textio - Overview,” n.d.). The estimated yearly revenue of the company is $30M. The monthly visitors of the website are 20,358, and its employees are showing high interest in iOS Push Notifications, Hashtag, and Pivotal Greenplum.

The first product of the company was Textio Talent; this product was made to be used by the employers to get the know-how of who will apply to the job post before it is published on a platform (Textio, n.d.). The product allows recruiters with real-time guidance pertaining to hiring and thus improving their performance. The predictive text engine by Textio analyzes a huge quantity of data utilizing advanced machine learning and natural language processing. It is constructed on 300 million job posts with the statistics of the actual performance of those ads; besides 10 million new jobs are added to the database every month. The other products include Textio Flow, Hiring Score, Bias Meter, and Central Library as well.

The competitive advantage of a company lies in the fact that it is the first to introduce the concept of augmented writing (“Textio,” n.d.). Businesses in this era of disruptive technology are looking for efficient ways to perform business functions. The idea of augmented writing has transformed the way companies write and hire their employees. Textio using its machine learning and AI technology that enable the companies to make most of their words (Chen, Chiang, and Storey, 2012). Textio Flows allows the teams to compose most interactive content in no friction of time. In addition, these features allow the companies to utilize their power of language; it also provides a score determining the effectiveness of writing material produced by the writers (“Textio’s New Tool Textio Flow Uses AI to Write Inclusive Job Postings | Fortune,” n.d.). Businesses these days are looking for technologies that work the best today to fulfil the business needs, Textio provides such technology in terms of writing service that caters to all the writing needs of a business.

In addition, the competitive edge of the company stems from the ability of its products to attract the right talent pool. Businesses are looking for multiple ways to attract, hire and retain the best talent, which may possibly contribute to their organizational objectives (Textio, n.d.). The technology offered by the company also allows for detecting and eliminating any gender bias and unconscious bias in the job postings by the employers. It sets the tone of job postings at the right balance; one is able to see the way they sound according to the text they have written. In this way, gender-neutral jobs enhance the company's ability to draw a pool of applicants that qualify well for the job.

# Section 2: Digital disruption analysis

Disruptive technologies can take time to disrupt the status quo, and so they're not necessarily easy to predict. Just because a company invents a technology that leads to a new market and ecosystem doesn't necessitate that it will succeed as a business. Technological competence doesn't equate to business competency, and first-mover advantage can be lost. However, Textio success is an example of the right application of machine learning and AI technology to uncap a business opportunity; business needs to demonstrate efficacy in its operations (Bose, and Mahapatra, 2001).

The company, Textio, specializes in Natural Language Processing, Enterprise software, Machine Learning and AI. The business model of the company is based on the technology of Artificial Intelligence (AI); machine learning is one element if AI and it allows machines to do the job based on the data provided to them. Artificial Intelligence is the name given to mechanical devices, robots, medical diagnosis and expert systems etc. which exhibits human traits, intelligence, and behaviour (Russell and Norvig, 2016). Although this name has been assigned to these machines which are able to display human characteristics, yet mechanical behaviour can't have complete parity with humans, because they are lifeless. Intelligence, consciousness, self-consciousness and super consciousness are the qualities which owe their existence to life. Since the above machines are lifeless, they can't have these human qualities. Still, scientists are giving these names for the purpose of convenience as no other appropriate words are available to the characteristic features which have suddenly appeared in these machines.

AI is more commonly used in the computer system and robots. Attempts are being made by computer scientists to upgrade these mechanical devices to compensate more and more human shortcomings. Weaknesses of human memory have been compensated to a great extent by introducing memory chips in these machines, which have increased this power manifold. Another shortcoming of humans is faulty communication ability. This is also being compensated with the help of Wi-Fi and other technologies. AI has transformed the way business operations are performed (Dirican, 2015).

The most common use of A.I. in business is in process automation of collecting, storing, analyzing and sharing data. Building models to influence customer behaviour (when you see things pop up in your news feed that one ends up clicking on) is another common use of AI. The tech titans and unicorns all are heavily invested in AI. Apps like Uber would not work efficiently if they didn't massively employ AI. You also see more and more chatbots, replace customer service staff. That's just a few examples of how a business can get started with using AI. The existing market of business enterprise is continuously looking for ways to make most of the technologies since these technologies are known to enhance the business performance and productivity to a higher percentage (Roll and Wylie, 2016). The future is all about machine learning and AI. The future is the elimination of lower support of humans and the need for fewer people in the organizations.

# Section 3: Challenges and opportunities

Artificial Intelligence or AI was something people first realized might be possible back in the 50s now it’s everywhere and developing rapidly. One could define it as building computers to carry out tasks without human intervention where humans would have to think about what they are doing. At the moment, we only have narrow AI, but it's realistically possible that artificial intelligence will equal human intelligence in the next few years. Super AI will probably be our final invention because, after that, our job is then effectively. Humans are making huge advances in nanotechnology, genetics, biotechnology, anti-aging medicine and most importantly in artificial intelligence or AI (Wang et al., 2015). In addition, the super AI will be the last invention that is not to say it's going to take over which is what some people are saying, super-intelligent machines will not replace humans. Nevertheless, what will happen is that we will merge with our technology creating human/machine hybrids (Bastug et al., 2017). The result of this is that super AI will be our final invention as humans; all other discoveries will be after the merger. The opportunities are infinite in the technology of AI (Thrall et al., 2018).

The businesses in the contemporary world have the vision of machine progressed world; however, no technology is without the shortcomings. AI and machine learning technology bring countless challenges, as well. Expectations associated with these technologies have exceeded reality; infinite dependency on these technologies can result in the business enterprises falling short of the inspired ideas of what can be possible (Anderson, and Anderson, 2011). In addition, such technologies are creating a talent gap; the right people needed to operate these technologies are still lacking. This contributes to the back lag of technology in the organization; the less number of people having the ability to take best from these technologies result in many business opportunities go unrealized. Due to the fact that market has very few people having enough knowledge of this technology, the demand and supply gap is higher which results in the high cost of hiring people who could operate such technologies well (Brynjolfsson, and Mitchell, 2017). In the example of Textio, people are needed who could write the text to obtain the best-augmented text that could meet the business demands.

A number of critics have also emerged who criticize the ethics of AI and modern disruptive technologies. Some of these ethical challenges are unemployment resulting from less need of people and automated jobs, inequality and distribution of wealth, and the impact on human behaviour and interaction (Dignum, 2018). Besides, another challenge is the question raised on artificial stupidity and racist robots (Bartneck et al., 2018). Critics raise several questions that technology cannot be everything to be relied on, and it cannot compete for human abilities; the fact that it is trusted beyond humans is not ethical or fair. In addition, a number of concerns pertaining to privacy and security have also been raised and they hinders the application of these disruptive technologies.

# Bibliography

Anderson, M. and Anderson, S.L. eds., 2011. *Machine ethics*. Cambridge University Press.

Bastug, E., Bennis, M., Médard, M., Debbah, M., 2017. Toward interconnected virtual reality: Opportunities, challenges, and enablers. IEEE Commun. Mag. 55, 110–117.

Bartneck, C., Yogeeswaran, K., Ser, Q.M., Woodward, G., Sparrow, R., Wang, S. and Eyssel, F., 2018, February. Robots and racism. In *Proceedings of the 2018 ACM/IEEE International Conference on Human-Robot Interaction* (pp. 196-204). ACM.

Bose, I. and Mahapatra, R.K., 2001. Business data mining—a machine learning perspective. *Information & management*, *39*(3), pp.211-225.

Brynjolfsson, E. and Mitchell, T., 2017. What can machine learning do? Workforce implications. *Science*, *358*(6370), pp.1530-1534.

Chen, H., Chiang, R.H. and Storey, V.C., 2012. Business intelligence and analytics: From big data to big impact. *MIS quarterly*, *36*(4).

Dirican, C., 2015. The impacts of robotics, artificial intelligence on business and economics. Procedia-Soc. Behav. Sci. 195, 564–573.

Dignum, V., 2018. Ethics in artificial intelligence: introduction to the special issue.

Roll, I., Wylie, R., 2016. Evolution and revolution in artificial intelligence in education. Int. J. Artif. Intell. Educ. 26, 582–599.

Russell, S.J., Norvig, P., 2016. Artificial intelligence: a modern approach. Malaysia; Pearson Education Limited,.

Schmidt, E., Cohen, J., 2010. The digital disruption-connectivity and the diffusion of power. Foreign Aff 89, 75.

Textio, n.d. Textio | The augmented writing platform [WWW Document]. Textio. URL https://textio.com/ (accessed 12.11.19a).

Textio - Overview [WWW Document], n.d. . Crunchbase. URL https://www.crunchbase.com/organization/textio (accessed 12.11.19).

Textio [WWW Document], n.d. . Welcome.AI. URL https://www.welcome.ai/textio (accessed 12.11.19b).

Textio, n.d. Textio Flow | Let’s write the future [WWW Document]. Textio. URL https://textio.com/products/flow/ (accessed 12.11.19a).

Textio: Most Innovative Company [WWW Document], n.d. . Fast Co. URL https://www.fastcompany.com/company/textio (accessed 12.11.19b).

Textio’s New Tool Textio Flow Uses AI to Write Inclusive Job Postings | Fortune [WWW Document], n.d. URL https://fortune.com/2019/04/23/textio-new-tool-textio-flow/ (accessed 12.11.19).

Thirgood, J. and Johal, S., 2017. digital disruption. *Economic Development Journal*, *16*(2).

Thrall, J.H., Li, X., Li, Q., Cruz, C., Do, S., Dreyer, K., Brink, J., 2018. Artificial intelligence and machine learning in radiology: opportunities, challenges, pitfalls, and criteria for success. J. Am. Coll. Radiol. 15, 504–508.

Wang, X., Li, X., Leung, V.C., 2015. Artificial intelligence-based techniques for emerging heterogeneous network: State of the arts, opportunities, and challenges. IEEE Access 3, 1379–1391.