Title of article: Is Cloud Computing Green Computing?

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#### Summary of Article:

The article asserts that Cloud Computing offers an everlasting environmental solution to the ever-growing problem traditional data centres have on the environmental footprint . Cloud Computing as indeed taken over the best fit or solution to expanding capacity needed to host the massive data (i.e. Big Data) being created by the many Internet connected devices. Cloud computing offers the hosting company of this Big data a solution of consolidating multiple computer servers, over different geographical locations, lower power consumption improving the carbon footprint and expansive data storage.

#### A. Quality of the Article

I found the title of the article to be very catchy, interesting and futurist, in a way I must admit that more development in Computing is on the way, however, cloud computing might have just presented us with a practical solution. The purpose and objective of the article is clearly articulated, it is very clear and easy to understand.

I have also found the information used in the article to be very accurate and good interpretation to a reader. The subject matter is relevant, as we welcome the fourth industrial revolution, such information is currently needed for important decision making in both large and small firms.

However, I find the estimate given by the author that; by 2020 emissions from IT systems in the whole would surpass the airline industry, misleading and inaccurate. This cannot be true, firstly we are only a year away from 2020, with cloud computing ever growing adoption especially by the big data corporation such as Facebook and Google, I do not see IT surpassing airline pollution soon. The author pointed us the fact that cloud computing might be the silver bullet to environmental issues of the past decades, I find this contradictory.

I also find the author to be objective in presenting his case. There were no ethical issues I found with the article so far. Another issue I find with statements made in this article are of exaggerating benefits of Cloud Computing, for example, the author mentions that the traditional on-premises servers are usually under-utilised, according to a McKinsey study, which states that only 6% of server utilisation and that worse still 30% of the servers globally are not used at all.

I argue that such problems are not tied to the type of technology but user preferences, utility and capacity. I can assure the author that once a firm has

adopted cloud computing most of their utility, preferences and capacity problems would surface again because such issues are usually down the organisational culture and leadership. "With increasing attention being paid to the environmental impact of cloud computing there are concerns about the sustainability of cloud computing model as its uptake increases." Wajid, Pernici and Francis (2013).

## B. Quality of Presentation

The article exhibited good presentation and well-structured format. The symbols, terms and concepts were well defined. Though, I would suggest that author present some of the information such as statistics in table form, for ease on the reader to compare and contrast them.

### C. Conclusion

Green IT has delivered considerable and measurable successes, as described by William and Curtis (2008), to be taken seriously. Many governments around the globe, as part of their environmental sustainability strategies, have introduced credits for reduction in carbon footprint to firms willing to play their part. Such initiatives have encouraged the creation of Green IT projects and these have become lucrative as they usually compensate their budgets through these credits. "Green IT and computing are key areas to contribute with the environment sustainability" (Welter et al., 2014).

There is also the drive to be corporate responsible citizen by firms, to be seen as an environmental sensitive company.

# D. References

Márcio Welter, Fabiane Barreto Vavassori Benitti, Marcello Thiry, "Green metrics to software development organizations: A systematic mapping", Computing Conference (CLEI) 2014 XL Latin American, pp. 1-7, 2014.

U. Wajid, B. Pernici and G. Francis, "*Energy Efficient and CO2 Aware Cloud Computing: Requirements and Case Study,*" 2013 IEEE International Conference on Systems, Man, and Cybernetics, Manchester, 2013, pp. 121-126. Accessed on 17 Feb 2019: doi: 10.1109/SMC.2013.28

Williams, J., & Curtis, L. (2008). *Green: The new computing coat of arms?* IT Professional Magazine, 10(1), 12-16. Accessed on 17 Feb 2019: *doi:http://dx.doi.org.salford.idm.oclc.org/10.1109/MITP.2008.9*