**Portfolio 2**

The increased competition in the digital market in the UK is the biggest challenge Small, and Medium Enterprises (SMEs) are experiencing. As a result, it is essential to understand how SMEs can maintain a stronger competitive advantage and higher agility. Four main statistical variables have been realized to achieve this: total online sales, digital marketing investment or expenditure, Return on Investment and the corresponding number of established SMEs.

First, the digital marketing expenditure or investments variable is important to understand as it gives insight into the resources available to SMEs and how these resources should be utilized. Also, digital marketing expenditure variable can offer valuable information on the marketing strategy for a company's effectiveness and how this strategy can be improved. Secondly, there is SME's Return on Investment (ROI) or revenue variable. This variable is helpful in understanding the marketing efforts of SMEs and determining if the expenditure made is worth the return. The third variable is total online sales. This variable indicates the total amount of sales generated through the digital channels. In particular, this variable is of significance in understanding the success of an SME’s strategy with regard to digital marketing. The fourth and last variable is the total count of established SMEs. This variable is important since it can provide an idea of how the digital market is competitive. Thus by doing this, it provides an insight into the level of competition and challenges facing the SMEs.

Concerning data collection for this study to investigate and explore the aforementioned variables, the intended database is World Bank. World Bank is a reliable, easy-to-access, and accurate data source which gives detailed quantitative data on a wide range of business-related topics from various countries (World Bank, 2019). However, the World Bank database may not provide all the necessary data that is specific to the UK, and this might be problematic as the current research is focused on the UK. Regardless, the data collected from World Bank would be reliable and suitable for the study, and relevant case studies from other European nations obtained from the World Bank database would also have greater implications for this study.

Once the data collected, the same data will be analyzed by standard linear regression analysis. Standard linear regression analysis is used because of its merit in that it allows the exploration of the correlation between the variables realized and also, and it helps in the realization of any outliers in the data (Schneider et al., 2016). Standard linear regression analysis gives an easy and simple way to examine the effect of each variable later on in the overall outcome. Nevertheless, it should be noted that linear regression analysis has some limitations. Linear regression analysis is limited in a manner that it makes an assumption that the data follows a normal distribution and that the relationships between the variables are linear (Yadav, 2022). Simply, this means that any relationships between the variables that are non-linear may not be taken into account. Additionally, linear regression analysis may not be suitable when it comes to analyzing datasets with a high degree of variability or datasets that come in large quantities.

**References**

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