The Impact that Covid 19 has had on Sustainable Innovation in Entrepreneurial Specialist Construction Firms in the UK.

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Recent studies have shown that small entrepreneurial construction firms operating in similar economies as the UK have been found to have changed business priorities due to covid-19, tending to be more social and economic focused to survive, in comparison to the previous focus of environmental improvements, (Barreiro et al, 2020). Innovation has previously been suggested to provide a business with the opportunity to achieve environmental sustainability in an everchanging environment and can achieve important benefits in construction such as cost reductions, quality improvements, and competitive advantages, (Walker, 2016). However, entrepreneurship is not a one-shoe-fits all approach but rather an iterative and integrative process involving specific characteristics, resilience, and external drivers that not necessarily involve a key influence of innovation. Most entrepreneurial construction firms rely on weekly projections in order to maintain market share and relevancy, and because of the recent pandemic most entrepreneurial businesses are now considered more financially vulnerable, diminishing the way in which innovation can be achieved (Maritz et al, 2020) posing problems with a way in which innovation can be achieved at a specialist trade level in construction. Traditionally, the tendency was to focus on individual entrepreneurs and their small organisations rather than consider the contextual environment. But, as we continue to operate in an interconnected world, various entities are required to understand how to be able to function innovatively and more environmentally sustainable without the financial impacts, (Ratten and Usmanij, 2020). But this doesn’t have to be the case if the financial barriers can be overcome using a circular economy approach simply closing the loop to limit the amounts waste produced within the construction sector and initiating innovative mechanisms to enhance focus to key business competitiveness and survival. Therefore, proposing an additional element to the current circular economy framework to assist in reopening the closed loop partially to provide insight to innovative mechanisms to entrepreneurial construction firms.  
Smaller firms need to find efficient means for introducing innovation successfully, especially changes in the way they manage their business primarily from sustainable initiatives, in the methods of construction business activities and projects, (Gorecki et al, 2019). Therefore, the circular economy can represent a regenerative concept that requires innovative economic change which simply brings business reasoning from production to consumption focus by closing the loop in comparison to traditional linear models, (Moraga et al, 2019). Entrepreneurship represents a key feature in capturing new circular business opportunities, with previous research focusing on the circular economy concept and its uses in larger organisations rather than at a smaller level of innovative strategies, (Crecente et al, 2021). Circular entrepreneurship can take two forms of adoption, firstly, new ventures into the construction industry and secondly, established small companies that are seeking to transition to less environmentally impactful activities and seek circular principles, (Zucchella and Urban, 2019). However, it remains unclear within the literature how Covid-19 has withdrawn the need to focus on environmental influence and instead financial stability in order to survive, (Suchek et al, 2019). The Covid-19 crisis has given key opportunities to in fact perceive chaos as an opportunity to employ creativity, innovation, and entrepreneurial characteristics to solve problems and grasp opportunities in an everchanging environment, (Gorzelany-Dziadkowiec, 2021). Therefore, this research papers aim is to gain a significant understanding to how entrepreneurial innovation in the construction industry post covid-19 can participate in environmental sustainability effectively without more financial problems by expanding upon the circular economy approach. This paper envisages to firstly take the approach of collecting recently published articles between 2016-2022 covering the pandemic and post-pandemic period using two databases being google scholar and business source premier to fully understand the state of entrepreneurial businesses and their environmental innovative behaviours in the construction industry three years prior to the covid-19 pandemic, during the pandemic, and post-pandemic in the UK. Alongside, a case study analysis which will take place during the development of a thesis providing practical insight into key areas in which cannot be obtained through secondary research alone, through semi-structured interviews and questionnaires. The integration of the series of literature to compare entrepreneurial behaviour over a series of years combined with primarily practical settings allows previous implications and current implications during the pandemic stages to understand the way in which environmentally innovative behaviours can be achieved taking in consideration financial barriers that are continuously referred to within the literature.  
  
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