

THE IMPACT OF LOW CARBON
WAREHOUSE PRACTICES ON
OPERATIONAL EXCELLENCE:
THE MEDIATING IMPACT OF GREEN
INNOVATION CAPABILITIES

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STUDENT'S DECLARATION

I hereby declare that the work in this thesis is based on my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at Universiti Malaysia Pahang Al-Sultan Abdullah or any other institutions.

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ABSTRAK

Kesedaran alam sekitar yang semakin meningkat oleh orang ramai dan pelaksanaan peraturan kerajaan memaksa organisasi untuk menggunakan amalan alam sekitar seperti amalan gudang rendah karbon (LCW) dan inovasi hijau (GI). Kedua-dua amalan adalah penting untuk mencapai kecemerlangan operasi (OE). OE membolehkan organisasi memperoleh kelebihan daya saing. Dengan mengamalkan amalan LCW, syarikat dalam industri pembuatan boleh meningkatkan keseluruhan OE mereka. Walau bagaimanapun, penyelidikan tentang hubungan antara amalan LCW, GI, dan OE agak jarang berlaku. Oleh itu, penyelidikan kaedah campuran berjujukan penerokaan ini dijalankan dan kajian ini bertujuan untuk menyediakan bukti empirikal yang menunjukkan bahawa amalan LCW dan keupayaan GI meningkatkan OE syarikat dengan ketara bagi menggalakkan syarikat pembuatan melaksanakan amalan LCW. Di samping itu, kajian ini menyiasat hubungan antara amalan LCW dan keupayaan GI dan kesan amalan ini terhadap syarikat OE di 160 syarikat pembuatan di Malaysia. Keputusan PLS-SEM mendedahkan bahawa terdapat hubungan yang signifikan dan positif antara amalan LCW, keupayaan GI, dan OE. Selain itu, keupayaan GI mempunyai kesan positif kepada syarikat OE. Tambahan pula, keupayaan GI mempunyai hubungan pengantara antara amalan LCW dan syarikat OE. Oleh itu, kajian ini mengesahkan pengaruh ketara amalan LCW terhadap meningkatkan GI organisasi dan ke atas penubuhan pembuatan, yang akhirnya menambah baik alam sekitar. Secara ringkas, hasil kajian ini memberikan pemahaman yang lebih baik tentang peranan penting GI dalam pengilang untuk menambah baik amalan LCW mereka dan OE syarikat. Model LCW komprehensif dalam kajian ini juga telah diuji secara empirikal untuk dipercayai dan sah. Ini akan membantu syarikat pembuatan memenuhi prestasi alam sekitar dan prestasi operasi melalui amalan LCW.

ABSTRACT

The emerging environmental awareness of the public and the implementation of governmental regulations force organizations to employ environmental practices such as low carbon warehouse (LCW) practices and green innovation (GI). Both practices are important to achieve operational excellence (OE). OE enables an organization to gain a competitive advantage. By adopting LCW practices, companies in the manufacturing industry can improve their overall OE. However, research on the relationship between LCW practices, GI, and OE is relatively rare. Thus, this exploratory sequential mixed methods research is carried out and this study aims to provide empirical evidence showing that LCW practices and GI capabilities significantly improve companies' OE in order to encourage manufacturing companies to implement LCW practices. In addition, this study investigates the relationship between LCW practices and GI capabilities and the effects of these practices on companies OE in 160 manufacturing companies in Malaysia. The results of PLS-SEM revealed that there is a significant and positive relationship between LCW practices, GI capabilities, and OE. Moreover, GI capabilities had a positive effect on companies OE. Furthermore, GI capabilities had a mediating relationship between LCW practices and companies OE. Therefore, the present study confirmed the significant influence of LCW practices on boosting the GI of organizations and on the manufacturing establishment, which eventually improves the environment. In brief, the outcomes of this study provide an enhanced understanding of the significant role of GI in the manufacturers for improving their LCW practices and companies' OE. The comprehensive LCW model in this study has also been empirically tested to be reliable and valid. This would help manufacturing companies meet environmental performance and operational performance through LCW practices.

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