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# DEVELOPMENT OPPORTUNITIES IN POWER ELECTRONIC APPLICATIONS IN SRI LANKAN INDUSTRIES

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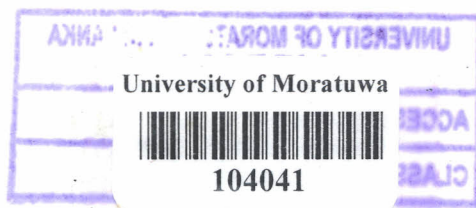
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The above candidate has carried out research for the Masters under my supervision.

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## ABSTRACT

Power electronics technology has gone through dynamic evolution in the last four decades. Recently, its applications are fast expanding in industrial, commercial, residential, transportation, utility, aerospace, and military environments primarily due to reduction of cost, size, and improvement of performance. In Sri Lanka industries modern power electronic applications are yet to come and there are few industries, which already have explored the modern power electronic technologies competitively.

It appears that the role of power electronics on our country in the future will tend to be as important and versatile as that of information technology today. In this dissertation, development opportunities in power electronic applications will be discussed after a brief introduction of drawbacks of the existing applications in the major industries like Food, Cement, Apparel, Sugar, Alcohol, Personal care and Home care.

Major development opportunities in Industrial power electronic applications are described in different chapters separately. For each proposed applications technical and financial feasibility were checked and pay back time was calculated through reliable cost analysis. Calculations have been done based on practically obtained data to determine the expected energy savings for each application

Case studies have done for two different industries where power electronic applications are used tremendously.



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