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Creating Energy Sustainability in an Enterprise

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Abstract : As we enter the new era of Artificial Intelligence (AI) and Cloud Computing, we mostly rely on the Machine and Natural Language Processing capabilities of AI, and Energy Efficient Hardware and Software Devices in almost every industry sector. In these industry sectors, much emphasis is on developing new and innovative methods for producing and conserving energy and sustaining the depletion of natural resources. The core pillars of sustainability are economic, environmental, and social, which is also informally referred to as the 3 P's (People, Planet and Profits). The 3 P's play a vital role in creating a core Sustainability Model in the Enterprise. Natural resources are continually being depleted, so there is more focus and growing demand for renewable energy. With this growing demand, there is also a growing concern in many industries on how to reduce carbon emissions and conserve natural resources while adopting sustainability in corporate business models and policies. In our paper, we would like to discuss the driving forces such as Climate changes, Natural Disasters, Pandemic, Disruptive Technologies, Corporate Policies, Scaled Business Models and Emerging social media and AI platforms that influence the 3 main pillars of Sustainability (3P’s). Through this paper, we would like to bring an overall perspective on enterprise strategies and the primary focus on bringing cultural shifts in adapting energy-efficient operational models. Overall, many industries across the globe are incorporating core sustainability principles such as reducing energy costs, reducing greenhouse gas (GHG) emissions, reducing waste and increasing recycling, adopting advanced monitoring and metering infrastructure, reducing server footprint and compute resources (Shared IT services, Cloud computing, and Application Modernization) with the vision for a sustainable environment.

Keywords : climate change, pandemic, disruptive technology, government policies, business model, machine learning and natural language processing, AI, social media platform, cloud computing, advanced monitoring, metering infrastructure
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