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## Technology Adoption Models: A Study on Brick Kiln Firms in Punjab

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Abstract: In developing countries like India development of modern technologies has been a key determinant in accelerating industrialization and urbanization. But in the pursuit of rapid economic growth, development is considered a top priority, while environmental protection is not given the same importance. Thus, a number of industries sited haphazardly have been established, leading to a deterioration of natural resources like water, soil and air. As a result, environmental pollution is tremendously increasing due to industrialization and mechanization that are serving to fulfill the demands of the population. With the increasing population, demand for bricks for construction work is also increasing, establishing the brick industry as a growing industry. Brick production requires two main resources; water as a source of life, and soil, as a living environment. Water and soil conservation is a critical issue in areas facing scarcity of water and soil resources. The purpose of this review paper is to provide a brief overview of the theoretical frameworks used in the analysis of the adoption and/or acceptance of soil and water conservation practices in the brick industry. Different frameworks and models have been used in the analysis of the adoption and/or acceptance of new technologies and practices; these include the technology acceptance model, motivational model, theory of reasoned action, innovation diffusion theory, theory of planned behavior, and the unified theory of acceptance and use of technology. However, every model has some limitations, such as not considering environmental/contextual and economic factors that may affect the individual's intention to perform a behavior. The paper concludes that in comparing other models, the UTAUT seems a better model for understanding the dynamics of acceptance and adoption of water and soil conservation practices.

Keywords: brick kiln, water conservation, soil conservation, unified theory of acceptance and use of technology, technology adoption

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