

## **Factors Influencing the Stakeholders' Intention to Adopt Mobile Application with Special Reference to Traditional Vegetable Supply Chains of Sri Lanka**

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Vegetable cultivation is an important subsector in the agriculture sector in Sri Lanka. However, traditional vegetable supply chains are affected by many inefficiencies due to long food miles which lead to high postharvest losses. This research explores the option of using a mobile application to develop linkages among various stakeholders in the vegetable supply chain and to create new market opportunities to address the existing inefficiencies. Due to the complexity of the supply chain and the involvement of several stakeholders it is of utmost importance to look at the stakeholder's intention to adopt such a technology before its introduction to the market. Therefore, the objective of this study is to identify factors that affect stakeholder's intention to adopt, identify how age affects intention to adopt and the stakeholder intention to adapt to the proposed mobile application. The research identified producers, consumers, delivery riders, wholesalers, retailers, and commission agents as the stakeholders in the vegetable supply chain. The Extended Technology Adoption Model was used to conceptualize the research. Perceived usefulness, perceived ease of use, perceived trust, perceived cost, subjective norms, and perceived risk are the independent factors and intention to adopt was the dependent variable. Primary data were gathered through a questionnaire across five stakeholder categories at the Dambulla Dedicated Economic Centre and the data of consumer category were collected through e-questionnaire. Sampling method is convenience sampling. All the results were calculated and analyzed through the smart pls, Amos and SPSS respectively. The findings show a significant positive relationship between perceived usefulness, subjective norms, and perceived ease of use in terms of stakeholders' intention to adopt mobile applications, while an insignificant relationship was identified with perceived ease of use, trust, age, and cost.

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