



Supplementary Material

Factors Influencing the Adoption of Smart Farming among Vegetable Farmers in Malaysia

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Received | October 25, 2024; **Accepted** | February 25, 2026; **Published** | May 08, 2026

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Citation | Omar, Z., A.R. Saili, A.S.A. Aziz, Z. Yusup, F. Rola-rubzen, A.S. Bujang and F.A. Fatah. 2026. Factors influencing the adoption of smart farming among vegetable farmers in Malaysia. *Sarhad Journal of Agriculture*, 42(2): 775-792.

DOI | <https://dx.doi.org/10.17582/journal.sja/2026/42.2.775.792>

Keywords | Smart farming, Malaysia, Partial least squares, Vegetables, Farmers, Technology



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Appendix A: Measurement items for constructs

Construct	Code	Item statement
Performance expectancy (PE)	PE1	Adopting smart farming in the farm enables farmers to manage farms easily and efficiently.
	PE2	Adopting smart farming components in farms can save labour costs and reduce wastage of inputs.
	PE3	I use smart farming applications to increase yields and profits.
	PE4	The adaptation of smart farming applications in the field can increase crop yields.
Effort Expectancy (EE)	PE5	By adopting smart farming in the field, the dependency on foreign workers can be reduced.
	EE1	I found it easy to manage the smart farming system after joining courses by local agriculture agencies.
	EE2	I found using smart farming components is easier and more efficient compared to the manual method.
Social Influence (SI)	EE3	The use of smart agriculture has led to positive routine changes where I can perform multiple tasks.
	SI1	There is someone I know who has successfully adopted smart farming.
	SI2	The government provides incentives and support to farmers who adopt smart farming.
	SI3	Before practicing smart farming, it is important to learn from other successful farmers.
Facilitating conditions (FC)	SI4	Increasing age is one of the reasons for using smart farming on the farm.
	SI5	I often receive visits from agricultural officers regarding smart farming technology used on my farm.
	FC1	I have the necessary knowledge to use the ICT system.
	FC2	There are organisations or groups that provide assistance related to smart farming.
Adoption (AD)	FC3	I have friends who help me handle computers and technology used in smart farming.
	FC4	My residence and farm have good internet coverage for the use of ICT systems.
	AD1	I need to adopt smart farming to increase my knowledge and access to information about growth areas.
	AD2	I must adopt smart farming to improve the quality of farm operations carried out by employees.
	AD3	Adopting smart farming can help me reduce the amount of time I spend on the farm.
	AD4	I can do other work to earn a higher income by using smart farming to monitor farm operations.
	AD5	Adopting smart farming makes work more comfortable and efficient for rural labourers.