A Constructivist Grounded Theory Study on the Impact of Automation on People and Gardening

Authors : Hamilton V. Niculescu

Abstract : Following a three year study conducted on eighteen Irish people that are involved in growing vegetables in various community gardens around Dublin, Republic of Ireland, it was revealed that addition of some automated features aimed at improving agricultural practices represented a process which was regarded as potentially beneficial, and as a great tool to closely monitor climate conditions inside the greenhouses. The participants were provided with a free custom-built mobile app through which they could remotely monitor and control features such as irrigation, air ventilation, and windows to ensure optimal growing conditions for vegetables growing inside purpose-built greenhouses. While the initial interest was generally high, within weeks, the participants' level of interaction with the enclosures slowly declined. By employing a constructivist grounded theory methodology, following focus group discussions, in-depth semi-structured interviews, and observations, it was revealed that participants' trust in newer technologies, and renewables, in particular, was low. There are various reasons for this, but because the participants in this study consist of mainly working-class people, it can be argued that lack of education and knowledge are the main barriers acting against the adoption of innovations. Consequently, it was revealed that most participants eventually decided to "set and forget" the systems in automatic working mode, indicating that the immediate effect of introducing people to assisting technologies also introduced some unintended consequences into their lifestyle. It is argued that this occurrence also indicates the fact that people initially "read" newer technologies and only adopt those features that they find useful and less intrusive in regards to their current lifestyle.
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