

The Role of Digital Contact Tracing Tools in Fostering Resilience in Smart Cities: Challenges and Opportunities*

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Abstract

The qualities of smartness for smart city offer a new perspective during the pandemic. The digital response of many countries in the face of the pandemic, is believed to strengthen resilience in this context. This research will examine this technical-social impact on Saudi citizens by investigating their experience using the official Saudi contact tracing app, Tawakkalna. Tawakkalna was initially developed to issue movement permits electronically during the curfew period. It has been constantly evolved ever since to include more services such as COVID-19 health status, until it becomes the official “health passport” for any citizen/residents to enter any organization or event, as of August 1 2021. Nowadays, Tawakkalna has become the ideal ubiquitous technology that every single Saudi individual must have to enter any place or attend any event. This research aims to explore users experience toward this tool and the role it plays to reshape and transform their day-to-day life in a profound way. This research is mixed-method case study, targeting Saudi citizens and residents who registered in Tawakkalna and has been using it as a movement permit for the last nine months. Investigating user experiences will help us gain a better understanding to explore the opportunities this tool brings to adapt and react to an unstable environment and overcome health crisis in the future. This study will offer practical implications as how these new innovative ubiquitous tools can facilitate citizens daily practices and pave the way faster toward resilient smart cities.

Keywords: Digital Contact Tracing Tool, User Experience, UX, Resilience, Smart Cities