

# Community Diagnosis for Development of Health Digital Technologies

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## Abstract

Community diagnosis was applied as an early stage of innovation management to find relevant digital technologies of health solutions at Mae Ka Sa district, Thailand. It included descriptive and analytical levels. The descriptive level derives from document analysis, interviews, and observation in the community. The analytical level implies to analyze data and get community involvement for proposing solutions. As for the findings, community diagnosis provided information about health and health service problems in the community, including consuming rain without considering the risk of contamination; lonely elders at risk of sudden illness, forgetting prescriptions and medical appointments; and receiving patients' unclear information for health diagnosis. These led to proposed ideas for digital technology development for health solutions in the community including measuring rain quality, detecting abnormal motion of elders, sending message alerts from elders, reminding patients to follow medical orders, and recording patients' symptoms.

Keywords: Innovation Management, Community Health, Community Diagnosis, Digital Technology

## Introduction

The Thai Network Information Center Foundation (THNIC) has an objective to enhance positive digital technology use in Thai society. It has set up a project utilizing the Thailand Networking Group (THNG) since 2010. The project aims to find volunteers of college students for digital technology production and implementation in rural Thai communities. In 2017, the THNIC set up a project for the THNG that concerned with producing digital technology solution for community health in Mae Ka Sa district, Amphoe Mae Sod, Tak province, Thailand. As part of the project, the THNG planned to identify the community health requirements. Then it sought to develop digital technology solutions for community health. This involved applying innovation management for the community. From a study by Engel et al. (2015), a set of innovation management refers to finding innovation requirements. This is early stage of innovation management.