Chapter 28
The Walkthrough Method:
State of the Art, Innovative Aspects, and Application Fields

Michela Cavagnuolo
Sapienza University, Italy

Viviana Capozza
Sapienza University, Italy

Alfredo Matrella
Sapienza University, Italy

ABSTRACT

Nowadays the social scientists are called to integrate within their studies new tools that modify and innovate the scientist's typical toolbox. Digital platforms, media, and especially apps pose further challenges to social scientists today, as they are an important place of significant socio-cultural, economic, health, relationships, and entertainment transformations. When studying digital technologies, in fact, it's important to pay attention to both their socio-cultural representations and technological aspects – since even design and data outputs have social and cultural influences. In this context, new research questions arise; among all the possible tools in the digital method toolbox, the walkthrough method is a noteworthy way to answer them. Starting from these considerations, this chapter aims to analyze, through a review of the literature, the birth and development of the walkthrough method in its various meanings to identify the innovative aspects and fields of application.

INTRODUCTION AND GOALS

Digital development has invested predominantly in all fields of society: the field of sociology and in general the field of social sciences are no exception. Starting from these considerations, social scientists are called to integrate everything within their studies with technological innovations and new tools that modify and innovate the scientist's typical toolbox. Digital platforms, media and especially Apps

pose further challenges to social scientists nowadays (Light, 2016), as they are an important place of significant socio-cultural, economic, health, relationships, and entertainment transformations (Light, Burgess& Duguay, 2016). When studying digital technologies, indeed, it is important to pay attention to both their socio-cultural representations and technological aspects – since even design and data outputs have social and cultural influences. In this context, new research questions arise; among all the possible tools in the digital method (Rogers, 2013) toolbox, the walkthrough method, object of our reflection, is a noteworthy way to answer them. Indeed, in addition to the purely technical aspect, using the walkthrough method it is possible to combine scientific and technological studies of cultural nature, allowing a critical analysis of the cultural meanings embedded in the creation and use of digital products, both by developers and by users.

One of the first uses of the Walkthrough as a technique - to distinguish it from the acceptance of authors like Grimes (2015) and Singh *et al.* (2000), regarding consumption and evaluation of cultural goods - came from software engineering (Human-Computer Interaction) and aimed to improve the quality of code and user experience, correcting them if it was difficult for users to follow the intended procedures or pathway (Fagan, 1976; Lewis *et al*, 1990; Nickerson & Landauer, 1997). Moreover, according to Duguay (2017), the Walkthrough method is not far from social scientists' research field. Indeed, the author combines Giddens' conceptualization of authenticity, that is the ability to refer to a coherent biographical narrative, with Callon's sociology of translation (1989), that is part of the Action-Network Theory (ANT) and summarizes in four phases the process of translation: problematisation, interessement, enrolment and mobilisation. Using these theories and the Walkthrough method - that questions Tinder's technological architecture, promotional materials, and related media - Duguay was able to identify how Tinder sets up a network of human and non-human actors that frames authenticity as established through their Facebook profile and follows regulatory standards relating to age, gender, ethnicity and socio-economic status. This approach paves the way for future investigations into user responses and demonstrates the broader applicability of this theoretical approach to identify human and technological influences on building authenticity with digital media.

Over the years, thanks to further developments, the Walkthrough method has been integrated to analyze the users' point of view and to evaluate the usability of software applications; therefore, it is configured as an analytical analysis tool that can combine analyses carried out across digital platforms (Katz, 2020) with classic qualitative techniques such as: interviews, for example to analyze how, in the context of global migration, the use of digital media can maintain transnational connections or to analyze the governance of different Apps and compare them (Li, 2020); focus groups, to evaluate the implementation of new Apps through the users' experiential system (Wardhani *et al.,*2019); content analysis, to analyze the terms of service and privacy policies and establish measures for the collection, storage, transfer, use and disclosure of App data (Heemsbergen & Molnar, 2020); critical analysis of the discourse, to analyze the digital intermediation of connectivity services (Cabalquinto & Wood-Bradley, 2020); participant observation, to carry out comparative analyses on the phenomenon of platformization (Nieborg, Duffy & Poell, 2020). Anyway, the approach that developed the most is the one of usability evaluation: the Human-Computer Interaction (HCI) implies an iterative process in which evaluation is fundamental to inspect the usability of the user interface. Usability evaluation, indeed, investigates how easy and enjoyable it is for users to efficiently use a system (Nielsen & Mack, 1994) and in general what are the system's specific strengths and weaknesses associated with its design. Usability is not an objective concept because it depends on the evaluator's personal interpretation of the HCI, that's why usability evaluation approaches try to identify what are the required features to consider a system "usable". Many

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