# Interactivity of Digital Media
## Literature Review and Future Research Agenda

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## ABSTRACT

This study reviews the literature on interactivity, a concept which is widely discussed in the context of media, communication, and information systems research. Extant research in these areas suggests that the concept needs timely explication with changes in mediated technologies. In this context, this study reviews the theoretical definitions of interactivity and discusses their relevance and shortcomings in the current scenario. The study also reviews past research works in interactivity based on the type of digital media. The study has categorized the interactivity literature into news, politics, health, e-commerce, mobile communication, and social media. Finally, the study has given directions for future research in each of these areas.

## KEYWORDS

Digital Media, Interactivity, Media Interactivity, Message Interactivity, Social Media, Source Interactivity

## INTRODUCTION

The digital media has been rapidly proliferating with the convergence of digital technologies in devices such as mobile phone, pc, laptop, tablet, TV and various other touch devices such as integrated into automobiles and other consumer durables. Consumers find digital consumption fascinating and personal because consumers can interact with the contents posted from their favorite networks and have more control over what they consume and how they consume. Although old devices offered limited interactive options - changing channels or adjusting sound and other features in TV and Radio, consumers have never experienced an interactive environment as in the devices of today, a capability gained by the integration of digital technology. Current technologies allow the user to create, control and consumer contents in the media using interactive features. Media companies are exploring innovative techniques to encourage consumer engagement in media through interactivity. Although past research has studied and operationalized the construct "interactivity" rigorously, the concept still needs further attention because the mediated environment is constantly disrupted by new technology. Nowadays, people can watch TV programs and interact with the crew in real-time through social networking sites. For example, football fans interact with commentators and players through social networking sites while the match is going live. Although it has been recognized as a distinguishing factor that can significantly enhance media consumption, how interactivity affects consumer cognition, attitude and behavior still need to be examined in the present scenario.

In this context, it is imperative to revisit the concept. Therefore first, we aim to examine whether the theoretical definitions of interactivity still hold true in the present scenario. Second, we enlist the typology of interactivity concepts studied in various contexts, so that future researchers can easily

explicate the concept with respect to the circumstance of the research. Third, our study focuses on reviewing the literature on interactivity vigorously based on the digital media of the study. We identified that interactivity has been studied in different digital media with related to news, politics, and health, and e-commerce, mobile and social networking sites. Generally, these are digital media where consumers spend the majority of their time while they are online. However, there is a dearth of literature to understand the maturity of research on interactivity in these areas. Moreover, technology affordance of these websites have been improving at a fast pace and thus redefines the scope of consumer interactions, whether it is human to the computer or human to human. Our study of literature leads to research questions which give direction for future research.

## REVIEW METHODOLOGY

We made a comprehensive search for past research works related to interactivity in research databases such as Web of Science database, Science Direct, Taylor & Francis, Sage Journals, Wiley Online Library, and Emerald Journals. The search period covers works of literature up to February 2019. The keyword used for searching was "interactivity." From the search results, we selected articles related to media, communication, psychology, information technology, and marketing. We ignored research works related to sociology and clinical psychology which are found to be irrelevant for this study. In total, we found 108 papers from academic journals and 6 from conference proceedings. We excluded dissertation papers and other articles published on the internet. After reviewing the literature, we developed a framework that categorizes the articles based on the digital media taken for the study (Table 2). First, we identified and reviewed all the seminal works in the area and commented its relevance in the present scenario in which mediated technology is changing abruptly. All such papers are listed in (Table 1).

## THE THEORETICAL DEFINITION OF INTERACTIVITY

Despite researchers redefined it several times, interactivity is still an unclear construct which leaves boundless meanings. This is primarily because the word interactivity has been used to denote a phenomenon in interpersonal communication where its scope is not clearly defined. For example, we use the term "interactivity" in direct face to face communication and indirect communication using mediated technologies. Moreover, the availability of numerous types of mediated technologies adds to the confusion, technologies such as Skype, Facebook, Whatsapp and even mobile phone calls to facilitate interpersonal communication. In addition, there are also interactions possible between devices and between human and devices, where we also use the same word 'interactivity' to mean those interactions. The term interactivity is derived from interaction, which in a general sense refers to a dynamic sequence of actions between individual or group entities who modify their subsequent actions in response to their interaction partners (Turner, 1988).

In this study, we are limiting the scope of the present discussion to any interactions involving human beings using a technology-mediated environment for the purpose of communication, although the term interaction is being used loosely in many areas such as in clinical psychology, sociology, and computer science. Our research objective is to study interactivity with special focus on communication and media studies. Therefore, we reserve interactivity to describe reciprocal communication exchanges that involve some form of media, or information technology. Users may involve in mediated social interactions while online for chatting, discussion, and teleconferencing and engage in interpersonal interactions with media content or non-human agents, email communication, computer game playing, e-commerce transactions, and various other forms of content interactivity (Bucy, 2004).

With the limited scope, researchers have defined the concept several times with the improved mediated technology. However, our study of the literature reveals that the concept was lastly explicated in the context of the website as a medium. But there has been an array of new features added to the

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