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Institutions and authors who would like to propose recently completed titles for this section of the journal are requested to send copies and abstracts to the editor of this section at the following address:

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## SCHOLARSHIP

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## LIDWIEN VAN DE WIJNGAERT MATCHING MEDIA, INFORMATION NEED AND NEW MEDIA CHOICE

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What time does the train depart from Amsterdam to Paris? If you want to know, you can find the answer in a number of ways: look it up in a train timetable; call a number for public transport information; consult an electronic timetable on a PC; search for the information on the Internet; walk down to the station and ask the ticket clerk; or ask a friend. There are many alternative sources of information available to secure an answer to this question. Some alternatives are old and others are new. All the options have advantages and disadvantages. Some are quick, others take a lot of time to get the answer; some cost money, others are free of charge; some are easy to use, others are cumbersome; some provide a simple answer, others provide additional information. The medium that is eventually used depends on many different factors: the context in which the question is asked, the characteristics of the person asking the question, and the media to which the person has access. Moreover, what happens if the circumstances change slightly? What happens, for example, when the inquirer hears that there is a delay?

It will become more and more important to take the specific functions and situations of media users into account when further developing media. The medium itself is no longer the starting point. The traditional sender, channel, receiver model does not apply any longer. Instead, personal factors, situations, and the functions of the media are of prime importance for users and must be taken into account. The information need is taken as a starting point to explain media choice and use. This approach is comparable to the fundamental starting points of Uses and Gratifications. The relation between information need and media choice is described in terms of contingency: media choice is explained as a match between information needs, user, and media characteristics. Media richness and other, less rationalistic, theoretical approaches were used to describe the match between information need and media choice in this empirical investigation.

During the past decades many new media that provide electronic information have emerged from technological developments such as telephone service numbers, teletext, CD-ROM and CD-I, videotex, and Internet. Most of these media were introduced because new technology allowed new possibilities and not because the public did express a great need for these media. Moreover, some of these media are successful, but many were not. In other words, the mere existence of media does not explain why they are used or not used. In order to explain the actual use of new media, it is important to start with the user and his or her (information) need, and not with the technology as such.

This study attempts to determine who uses which medium for what purpose. More specifically, the study aims at finding out what factors influence people's use of media in general and new and electronic media in particular. The goal of obtaining this awareness is to be able to introduce new media in a situation where that media will

actually be used. Using this approach, this investigation may contribute to a more successful introduction of new media.

The first step in this study was to obtain insight into the way in which different new media are (subjectively) evaluated. Not the objective characteristics but the subjective evaluation of a medium influences media choice. Research, based on Qmethodology, was conducted to determine which of a large number of media characteristics (such as speed and user friendliness, but also the kind of information that can be found) were most important. For each of the characteristics found an item was formulated that needed to be ordered on an agree/disagree scale. In total 90 Qsorts (a complete ordering of all items) were collected for five media (telephone service numbers, teletext, off-line media, videotex and Internet). Respondents were users, providers of information and services and scientists involved in this research area. Factor analysis was used as a method to analyse the data.

The most important result of the Q-research is that media evaluation can be explained by looking at the match between technology, task (i.e., information need) and (user) context characteristics. It is important not only to look at technology, task or the user separately, but also to look into the combination of clusters in order o explain how media are evaluated. The task-technology cluster relates to the kind of questions that can be answered by using a certain medium. Several (sub)clusters were distinguished: topicality, interaction and uniqueness. For the user-technology cluster, another set of (sub)clusters should be taken into account. Each of these clusters is an aspect of accessibility: physical, financial, cognitive and affective.

The main research focuses on how these clusters influence the relation between information need and media choice. The goal of this part of the study was to determine in what way need for information is related to media choice, while taking differences between users into account. Policy capturing was used as a research method. In simplest terms, policy capturing consist of providing individuals with contrived hypothetical situations and respondents are asked to respond to the situation. In this research the hypothetical situation is an information need. The information needs are created by systematic variation on the subclusters that were found in the preliminary research. Respondents (a representative sample of 538 Dutch University students) were asked to choose a medium that would solve a presented information need. Furthermore, the questionnaire consisted of questions on media use (physical access in context, experience, frequency of use, and attitudes toward). Multilevel logistic regression was used to explain the variance in media choice.

The initial result of the analysis is that only media were chosen to which people had physical access in the context of the question. In other words, physical access is a necessary but insufficient condition for media choice and subsequently use. Secondly, the results of multilevel logistic regression show that differences between information needs lead to differences in media choices. Moreover, we can conclude that media choices do not depend on a single characteristic of the information need. All characteristics that were used in this research (topicality, uniqueness, interaction and context) contribute to the explanation of media choice. Thirdly, the information was much more powerful in explaining media choice than accessibility. This leads to the conclusion that the success of new media does not depend on all the new possibilities that new information technology offers us. The success of new media depends on the degree to which they fulfil user needs.