

# Media Channel Preferences of Mobile Communities

**Peter J. Natale**

*Regent University, USA*

**Mihai C. Bocarnea**

*Regent University, USA*

## INTRODUCTION

Contemporary organizations are drastically changing, in large part due to the development and application of newer communication technologies and their respective media channel options. Within virtual organizations, business leaders are increasingly faced with issues associated with managing and communicating with their mobile workers. According to Richard L. Nolan and Hossam Galal of the Harvard Business School, global businesses are aggressively exploring and investing in the virtual organization paradigm. Furthermore, organizations of all sizes increasingly have become virtual in nature. In the case of organizations involved in information processing, newer communication technologies are being used by 71.9% of small firms and 81.3% of large firms, according to a Small Business Administration study. The same study also concluded that the number of U.S. companies that have virtual and telecommuting programs have more than doubled since 1990.

The challenge for leaders within this rapidly changing environment is to determine the best ways to lead and communicate with increasing numbers of mobile staff members. These leaders have an astounding array of high technology communication tools to choose from when communicating with their employees. They also have concerns about the preferences and uses these workers have for various forms of communication. As organizations seek to optimize communication and share information with their mobile workers and scholars seek to understand the utility and influence of specific organizational communication technologies, such as PDAs and smartphones, which are rapidly emerging as a new and appealing communication tools.

The core capability of these devices is a combination of software and hardware that transfers voice and

e-mail wireless messages and performs other business related tasks. Current estimations indicate that mobile data will have a penetration rate among the U.S. population of nearly 60% in 2007.

Scholars interested in how media channels are used within organizations have turned their attention to the nature, use, and effectiveness of communication tools such as these. They also have been interested in how the particular characteristics of employees relate to their preferences among traditional and newer communication channels. Media richness theory has been one theoretical framework which has been applied by researchers to this environment. Media richness in the organizational context involves the rational process of media selection in which the characteristics of each communication channel are matched with the content or information richness of a message in order to reduce uncertainty. One variable that may be at work when media types are selected in terms of their richness is "learning styles." These individual learning styles and their relationship with media choices on the basis of richness has been studied previously (Rex, 2001), but not in the case of portable devices. Learning styles are different ways of learning; essentially scholars and practitioners concerned with learning styles have looked at the preferences of individuals and how they process information through their unique senses.

## BACKGROUND

Using the media richness theory, this study provides further understanding of learning style as a criterion for the selection of handheld media channels by mobile employees. Previous research indicated that learning styles are related to media channel selection and use, although individual media choices and their relationship

with learning styles of members of virtual organizations have rarely been examined where employees are highly mobile. Although many types of learning styles exist, this study concentrates on the expressive learning style when sending and receiving messages. The expressive learning style is based on dividing an individual's learning into four different processes: concrete experience, reflective observation, abstract conceptualization, and active experimentation. It is worthy of special consideration because individual learning is a continuum through time based on these processes whereby people eventually rely on one preferred learning style.

Portable communication technologies are not just being applied in specific organizations; they may be part of a technological trend of more universal importance. Currently many communication and media channel choices exist for organizations to utilize. However, finding the best combination of the most appropriate choices for communication in responding to a changing business environment can be difficult. The unique ways in which mobile devices are used are different from fixed, or full-featured personal computers and telephones. PDAs and smartphones represent different usage patterns and employ a different user interface.

These differences could impact usability, including the way text messages are created and sent. Compared with PCs, mobile device screens are small in size, their computing ability and power supply limited, and internal data storage capabilities have fewer megabytes. When used for sending and receiving voice mail, these devices primarily support traditional audio options found on a fixed line telephone.

Figure 1 graphically describes the use of portable, handheld appliances and their relationship to the tasks of media channel sending and receiving of voice and electronic text messages.

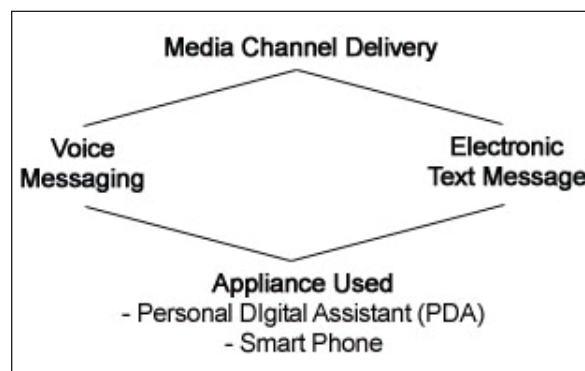
Text messaging closely mimics the communication tool known as e-mail. E-mail has the ability to forward mail to an individual's Internet mail address. Electronic text messages can be sent to an appliance such as a PDA, Blackberry, or pager. Text messaging is typically used for messages that are no longer than a few hundred characters yet this communication medium is interchangeable with e-mail, as their general capabilities are quite similar. The participants in this particular study sent and received electronic text messaging through their portable appliances only. The variable differences between e-mail and electronic text messaging depend on the device that is used to send and receive messages.

## INDIVIDUAL MEDIA CHANNEL SELECTION AND USE

This study uses the communication technology framework set forth by Daft and Lengel (1984). Their category schemes are used as basic dimensions for defining media characteristics. The theory was originally developed to focus on executive level communications.

When individuals do not express themselves well during auditory messaging, even though voice and face-to-face channels are ranked as rich media on the media richness scale, situations may arise that confound the media richness criteria (Rex, 2001). In

Figure 1. Media delivery mechanisms used by virtual workers



5 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: [www.igi-global.com/chapter/media-channel-preferences-mobile-communities/17496](http://www.igi-global.com/chapter/media-channel-preferences-mobile-communities/17496)

## Related Content

---

### Context-Based Scene Understanding

Esfandiar Zolghadr and Borko Furht (2016). *International Journal of Multimedia Data Engineering and Management* (pp. 22-40).

[www.irma-international.org/article/context-based-scene-understanding/149230](http://www.irma-international.org/article/context-based-scene-understanding/149230)

### A Novel Research in Low Altitude Acoustic Target Recognition Based on HMM

Hui Liu, Wei Wang and Chuang Wen Wang (2021). *International Journal of Multimedia Data Engineering and Management* (pp. 19-30).

[www.irma-international.org/article/a-novel-research-in-low-altitude-acoustic-target-recognition-based-on-hmm/276398](http://www.irma-international.org/article/a-novel-research-in-low-altitude-acoustic-target-recognition-based-on-hmm/276398)

### Security of Mobile Devices for Multimedia Applications

Goran Pulkis, Kaj Grah, Jonny Karlsson and Nhat Dai Tran (2008). *Multimedia Technologies: Concepts, Methodologies, Tools, and Applications* (pp. 660-704).

[www.irma-international.org/chapter/security-mobile-devices-multimedia-applications/27115](http://www.irma-international.org/chapter/security-mobile-devices-multimedia-applications/27115)

### Web 2.0 and Beyond-Participation Culture on the Web

August-Wilhelm Scheer (2009). *Encyclopedia of Multimedia Technology and Networking, Second Edition* (pp. 1537-1544).

[www.irma-international.org/chapter/web-beyond-participation-culture-web/17582](http://www.irma-international.org/chapter/web-beyond-participation-culture-web/17582)

### Towards Improved Music Recommendation: Using Blogs and Micro-Blogs

Remco Snijders and Marco Spruit (2014). *International Journal of Multimedia Data Engineering and Management* (pp. 34-51).

[www.irma-international.org/article/towards-improved-music-recommendation/109077](http://www.irma-international.org/article/towards-improved-music-recommendation/109077)