Impact of The Digital Technology on Culture: Lessons from a Pilot Study

Shreekant G. Joag
St. John's University, New York
631-801-2211, drjoag@aol.com

ABSTRACT

Culture is defined as the sum total of people's beliefs, values, customs, norms, morals, and all other capabilities and habits that regulate their behavior in a society. Culture is all encompassing, and so pervasive that it affects the very way people think and act. Learning about one's own and other foreign cultures critically depends upon absorption of new information and communications. In recent years, digital media have opened several new avenues of information transfer, communication, and entertainment and changed the way we live in a fundamental way.

This paper presents a research study designed to measure the impact of the digital media on the lives of the young people, a population segment of the most extensive users of the new media. It also presents the findings of a pilot study conducted to actually measure such impact. The findings are valuable in fine tuning both the objectives and the design of the research study.

INTRODUCTION

Marketing aims at understanding, explaining, predicting, and possibly controlling exchanges in all spheres of human life in order to make the exchanges more efficient and effective in benefiting all parties concerned. American Marketing Association defines the term "marketing" thusly (AMA 2010): "Marketing is the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large."

Consumer orientation—understanding the needs and constraints of consumers –is at the core of modern marketing science and culture plays a unique role in the formation of human personality. Culture is defined as the sum total of people's beliefs, values, customs, norms, morals, and all other capabilities and habits that regulate their behavior in a society. Culture is all encompassing, and so pervasive that it affects the very way people think and act. On the one hand, culture pervades and shapes from within the total personality of individuals who grow up in the culture, and on the other hand, the

unabsorbed aspects of the culture act as external forces that influence, facilitate, and constrain individuals' desires and behaviors (Samuel and Douglas 2006).

With the increased interaction of world cultures due to globalization of commerce, education, and travel, cultures are constantly changing by responding to and incorporating elements from foreign cultures. Depending on one's view of its desirability, such changes are described as contamination, pluralization, hybridization, enhancement, or even enrichment (Friedman 2005).

UNDERSTANDING CULTURE

Despite a very long history of research in the field, and a general recognition of its importance in many disciplines, there is no universal consensus on the definition of culture. Many competing definitions have attempted to capture the most important aspects of culture (Joag 2010, 2011).

For the purpose of this paper, culture is defined as the sum total of a society's accumulated learning—consisting of mental knowledge and capabilities, and physical skills—that affects the very way the society lives, and the expression of that learning through their ideas (beliefs, values, and morals), behaviors (laws, norms, customs, habits, language, religion, and social institutions), and creations (social infrastructure, buildings, bridges, monuments, art, architecture, and industrial and consumer products). In short, it is the way people in a society live.

It is recognized that the various elements and dimensions of culture are not independent, but rather are interrelated. One element of a person's culture such as race has an impact on another element such as the social status, which in turn may influence a third element such as the language spoken. Thus, culture is not a collection of independent attributes and behaviors but rather like a jigsaw puzzle in which each piece has a specific position and role, and all fit together (Terpstra and David 1991).

IMPORTANCE OF INFORMATION AND COMMUNICATIONS IN EVOLUTION OF CULTURE

Culture is formed through communications and interactions among people. Further, culture is not stagnant; rather it is constantly changing and evolving through interactions among people within a culture and with those of other cultures. Learning about one's own and other foreign cultures during the enculturation and acculturation processes also critically depends upon absorption of new information and interpersonal communications.

In recent years, digital media have opened several new avenues of information transfer, communication, and entertainment. These changes have made a major impact on people's lives and changed the how they do things in a fundamental way. As is true with all innovations, some people have been enthusiastic about these changes and have become extensive users of the new media; while others have been cautious and use them when necessary and appropriate.

It is therefore important for global marketers of products and services, and communicators of ideas, including educators, in both profit and nonprofit organizations to understand these changes in the lives of their audiences if they have to remain effective in influencing their decisions.

IMPACT OF DIGITAL TECHNOLOGY ON INFORMATION TRANSFER AND INTERPERSONAL COMMUNICATIONS

Digital Technology and Information Transfer

The rapid advances in digital technology and its many applications that have impacted peoples' lives is a many-faceted phenomenon. Digital technology has practically eliminated, that is reduced to virtually zero, the time-lag involved in transmission and reception of information. It has made it possible to receive, process, store, and retrieve information at such high speeds that for all practical purposes, it is happens virtually instantly. Further, the numerous, easy to carry and always-ready-for-use digital gadgets

have also made it possible to carry on such information transfer anytime, anywhere, and in total privacy.

Digital Technology and Communications

Communication is exchange of information among people. The modern gadgets using the technology have made it possible for people to communicate with one another instantly, anywhere, anytime, and in total privacy in three different ways:

-They can carry on a two-way or synchronous communication—like a face to face conversation.

-They can have a one-at-a-time or asynchronous communication without a time lag—like on a walky-talky or a text-chatting.

- Or, they can have one—at-a-time or asynchronous communication with a time lag—like sending an email, or regular mail.

Role of Social Media Using Digital Technology to Facilitate Communications

Many social media services have facilitated instant communications among people by helping the users organize their personal contacts into groups with different levels of access and communicate or share information with each group instantly. Many social media have gone even beyond and created proactive platforms that make all communications between any two individuals instantly known and accessible to all members of a group, and indirectly encourage them to comment on or participate in that conversation rather than remaining just spectators.

IMPACT OF DIGITAL TECHNOLOGY ON PEOPLES' LIVES

This new ability to have instant private exchange of information and communications among individuals and groups has changed our lives in a fundamental way. People can now exchange information simultaneously with multiple sources and carry on communications with multiple parties while carrying on virtually any of our other public or private activities and responsibilities. And many in fact do so. People check their mail, pay bills, listen to music, watch news, or chat with others while in office at their desks doing their jobs, traveling, watching television, relaxing, eating a meal, or taking a walk.

Such multitasking has enabled people to live far and still be closely involved in one another's lives.

NEED FOR MARKETERS TO UNDERSTAND THEIR NEW DIGITALLY-CONNECTED CUSTOMERS

Clearly, it is important for marketers to understand these major changes in culture to plan their communications with target customers and be effective in accomplishing their marketing objectives. Many marketers have in fact taken a further step and become active members of such social media such as the Facebook, Twitter, etc. and created their own groups of customers to communicate with and learn from.

RESEARCH OBJECTIVES

On this background, the present study was designed to measure the extent of access the present young generation has to the digital media, their extent and patterns of usage in daily lives, their preferences and problems in using the media, and the overall impact of digital media on the youth culture: how they learn, communicate, and entertain themselves.

The research had the following specific objectives:

•To develop a structured instrument to measure the access, extent and reasons for use, and the impact of the digital media on lives of the youth. Specifically, the instrument should serve the following purposes.

    1. to measure the extent to which digital technology is

    - accessible to young adults for use, and

    - is actually accessed and used by the youth

    2. to understand the purposes for which the digital technology is used by the youth

    3. to measure the extent to which the digital technology has penetrated their lives and impacted them

• To actually conduct a pilot survey to measure the impact of the digital media on the lives of the young generation

It is hoped that such a study would provide American marketers and communicators valuable information about their customers and help develop effective marketing strategies.

RESEARCH DESIGN: Digital Technology's Impact on Youth Culture

1. As the first step, the study developed an exhaustive list of important facets of the digital technology: the various access instruments, media networks, and services available to the users. These facets are presented in Exhibit 1.

EXHIBIT 1
FACETS OF DIGITAL TECHNOLOGY: ACCESS INSTRUMENTS AND MEDIA

Electronic Instruments	Access Systems	Digital Media Services
• Desk top Computers	• Telephone lines	• Email Services (Hotmail, AOL, Gmail, etc.)
• Laptop Computers	• Cable	
• Tablet Computers (iPad, Kindle, Kindle Fire, Nook, etc.)	• Direct through Satellite	• Social Media (Facebook, Twitter, Linkedin, Instagram, etc.)
• Smart Phones	• Other	• The Internet
• Other		

2. Next, several measures were developed to gather information on the nature of access and the extent of usage of digital technology. These are presented in Exhibit 2.

Exhibit 2
Measures Used for Nature of Access and the Extent of Usage of Digital Technology

• Specific service, product, or brand used
• Frequency of access during a typical day
• Number of days of access during a week
• Total amount of time spent during a day

3. The purposes for which the digital technology was used were classified into several categories. These are presented in Exhibit 3.

Exhibit 3
Purposes for Using Digital Technology

• To get or give information concerning studies or school work
• To get or give specific information concerning social life and contacts
• Access without any specific objective e.g. to check for updates, exploration of new things, entertainment etc.
• Information about specific individuals in city, state, the USA, or other countries
• Information about people and places in general in city, state, the USA, or other countries

4. The multitasking facilitated by the digital media was investigated by listing major categories of activities of a daily life and inquiring the extent to which digital media were accessed during each of these activities. The categories of activities are presented in Exhibit 4.

Exhibit 4
Major Activities During which Digital Technology is Used to Multitask

• When alone at work
• When driving
• When alone: eating, watching television, exercising, walking, in bed, bathroom
• When in a meeting at work
• When attending a lecture, church service, watching a play, or a movie in a theater
• When in a library
When socializing with family and friends
When among strangers: traveling in a taxi, bus, train, plane, in a retail store

5. Simple category scales were used to measure access, nature, and extent of usage of various digital technology instruments and media services.

6. A sample item illustrating the category scales used and the instructions given to the respondents are presented in Exhibit 5.

Exhibit 5
Sample Items Illustrating the Category Scales Use and Instructions Given

1-9	How often do you multitask and access your Messages, Email account(s), Social Media account(s), Blog(s), and the Internet during the following activities/occasions: 1 = [Never], 2 = [Rarely], 3 = [Occasionally i.e. 2-3 times a week], 4 = [Frequently i.e. 4-5 times a week], 5 = [All the time i.e. regularly] 1 2 3 4 5
1	When you are alone at work
2	When you are driving
3	When you are alone: eating, watching television, exercising, walking, in bed, bathroom
4	When you are in a meeting at work
5	When you are attending a lecture class, church service, watching a play or a movie in a theater
6	When in a library
7	When socializing with family and friends
8	When you are among strangers: traveling in a taxi, bus, train, plane, in a retail store
9	Any other (Pl. specify here and respond)*

OBJECTIVES OF THE PILOT STUDY

It was decided to conduct a pilot study using the instrument with two important objectives:

1. To examine the adequacy of the instrument in eliciting the desired information from the respondents, and

2. To evaluate the adequacy of the information sought in generating meaningful conclusions for the marketers.

DESIGN OF THE PILOT STUDY

1. A sample of 25 senior undergraduate student respondents was selected for the study. The individuals were selected from available volunteers based on the following criteria:

a. Their exhibited level of enthusiasm and interest in the study

b. Their ability to understand the questions and communicate their responses effectively

c. Their willingness to reveal their names with their responses to enable further investigation of the reasons for their specific individual responses where necessary.

2. After administering the questionnaire and collecting their responses, the respondents were invited to a group discussion to talk about any difficulties they had had in using the instrument and their suggestions to improve it to make the study more effective.

3. After examination of their responses, individual respondents were approached to seek any necessary clarifications of their responses that may have apparent contradictions or misunderstanding of the intent of the inquiry.

4. Based on the learning from the respondents' individual and collective feedback, modifications to the original questionnaire were planned. To ensure that the modifications and changes proposed were adequate and effective in serving their purpose, a supplementary questionnaire consisting of changed and new items was created, and administered to the same respondents. Since the respondents' names were identified on all responses, it was possible to merge the responses obtained from the two surveys at individual level. The merged responses were then examined to check if the modifications had in fact been effective in eliciting needed information, and if the total information was sufficient enough to draw meaningful conclusions for American marketers.

INVESTIGATING THE FINDINGS OF THE PILOT STUDY

1. The pilot study enabled the researcher to identify problematic wording and/or sequencing of items of the instrument and make necessary changes to correctly convey the cultural dimensions being explored.

2. The study showed that most questions were not sensitive in nature and the respondents were willing to openly share their attitudes and behavior concerning the use of digital technology in their lives.

However, there were a few items that could be sensitive resulting in responses that are more appropriate than accurate. These items related to the use of digital technology to do things that may be considered inappropriate while engaged in other activities of the daily life as listed below in Exhibit 6.

Exhibit 6

Items of Sensitive Nature in Use of Digital Technology During Other Activities

1-9	How often do you multitask and access your Messages, Email account(s), Social Media account(s), Blog(s), and the Internet during the following activities/occasions:
1	When you are alone at work
2	When you are driving
3	When you are alone: eating, watching television, exercising, walking, in bed, bathroom
4	When you are in a meeting at work
5	When you are attending a lecture class, church service, watching a play or a movie in a theater
6	When in a library
7	When socializing with family and friends

In view of this problem, it may become necessary to use other types of indirect questioning to obtain factual information on these issues.

CONCLUSION

As is expected, the pilot study brought out minor shortcomings of the instrument that were easy to correct through modification, clarifications, and rewording of items. In addition, the pilot study brought out the important issues of sensitive items that may need the use of indirect questioning techniques to obtain reliable and factual responses. It would be interesting to use both direct and indirect techniques for such items to verify the actual nature and level of sensitivity invoked by them among respondents.

REFERENCES

The American Marketing Association,
http://www.marketingpower.com/AboutAMA/Pages/DefinitionofMarketing .aspx,
accessed September 26, 2010.
Craig, C. Samuel and Susan P. Douglas (2006), "Beyond National Culture: Implications
of Cultural Dynamics for Consumer Research," International Marketing Review, 23, no.
2, 322.
Friedman, Thomas L. (2005), The world is Flat, New York: Farrar, Straus and Giroux.
Joag, Shreekant G., Marketers Need Cultural Introspection," in Proceedings, Global
Awareness Society International, 19th Annual Conference, Krakow, Poland, May 23-25,
2010, 1-10.
Joag, Shreekant G., "Cultural Introspection: Findings of a Pilot Study," in Proceedings,
Global Awareness Society International, 20th Annual Conference, San Juan, Puerto
Rico, May 26-29, 2011, 59-68.
Terpstra, Vern and Kenneth David(1991), The Cultural Environment of international
Business, Cincinnati, OH: South-Western Publishing co., p6.