

## Acceleration of Communication Technology in Social and Cultural Change in Society

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### ABSTRACT

This study aims to explore and deepen the use of information technology in education and social learning in schools and its impact on improving students' knowledge and motivation levels in social learning. A descriptive qualitative approach was used in this study with participants being teachers and high school students in Medan, North Sumatra, Indonesia. Research data were collected through interviews, observations, and documents. The findings of this study explain that the use of information technology such as online learning, the web, and social media in social learning provides an acceleration of socio-cultural change that has a positive impact on developing students' insights into broader learning materials, increasing students' knowledge of social materials and motivation in learning, which ultimately has an impact on social change in society. This study recommends that the use of information technology is very important in achieving learning objectives, developing knowledge and motivation. To achieve these goals, it is necessary to be supported by the ability and skills of teachers in utilizing technology in learning and the development of technological infrastructure in schools to support information technology-based social learning activities.

**Keyword:** acceleration; information technology; socio-cultural change

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## 1. INTRODUCTION

The development of communication and information technology has now reached a level of vital necessity for human life. Its function is not only limited to serving as a medium of communication between individuals in social interactions, but also extends more broadly to interactions among institutions, across regions, and even across nations and continents.

Such rapid progress has brought a wide range of impacts on social life. This phenomenon has triggered significant changes and shifts in lifestyles and interaction patterns. The transformation has moved from direct, face-to-face communication toward mediated communication using technological platforms. One of the gradual consequences of this development is the erosion of local wisdom within the context of traditional customs and broader cultural practices.

Islamic social values, as a source of norms and teachings for Muslims, encompass all aspects of human life. These values govern not only worldly matters as forms of practical devotion, but also matters concerning the hereafter. In the context of social relations, these teachings are translated into *hablum minannas*, which regulates modes of interaction and communication as manifestations of da'wah values.

The development of communication technology in the modern era represents a cultural advancement that is massive in scale, resulting in profound effects across various dimensions of life. Both urban communities and those in remote areas have undergone changes due to the influence of technological advancements in communication.

Technology and culture essentially evolve in tandem with the progress of human civilization, which operates within social and state frameworks. This also includes an overview of change and development from

the perspective of Islam, illustrating how this concept becomes an urgent component in shaping socio-cultural transformation, particularly in relation to contemporary societal behaviors.

## 2. RESEARCH METHOD

This study employs a qualitative research method with a case study approach. The term *case study* refers to the investigation of a particular case or multiple cases within their real-life context. The word "case" signifies an event, phenomenon, or subject of inquiry, which carries a broad and complex meaning. A case study involves an in-depth exploration of a "bounded system" or a specific case (or multiple cases) through comprehensive data collection that incorporates multiple rich sources of information within a defined context. As a form of descriptive analytical research, the case study focuses attention on a particular case to be observed and analyzed thoroughly.

The research was conducted at SMA Muhammadiyah 01 Medan, North Sumatra, located at Jl. Utama No. 170. The data collection process took place over two months, from December 2024 to January 2025. Data were obtained through in-depth interviews with social studies teachers, students, and school management, as well as direct observations of social activities carried out at the school. The study also included the examination of relevant documents concerning the use of information technology in social activities at SMA Muhammadiyah 01.

Interviews were conducted with ten respondents, consisting of five social studies teachers and five students. The interview questions focused on how they integrate information technology into social activities, the types of materials utilized, and the challenges encountered in the process. Observations were carried out during activities such as religious gatherings (*pengajian*), collective prayers, and celebrations of Islamic holidays. The collected data were then analyzed using thematic analysis techniques to identify patterns and relevant themes.

## 3. RESULTS AND DISCUSSION

Social change refers to a transitional process that alters the structure of community life and continues to occur due to the dynamic nature of society, which is inherently capable of transformation. It encompasses the changes experienced by individuals and social institutions within a community that ultimately affect its social system, including values, customs, cultural traditions, social attitudes, and behavioral patterns among groups within society. Various theories of social change tend to be specific and detailed, focusing on certain aspects of society or institutions. The impact of social change in one community may differ significantly from that in another. Social change may occur rapidly or gradually across various social structures. This process does not take place automatically; it follows certain mechanisms and emerges with particular objectives. The pace of social change can be revolutionary or evolutionary. Factors contributing to social change may originate from within the community or from external forces, and both are often interrelated.

### A. *Culture and the Impact of Communication Technology Development*

The development of communication technology in Indonesia, particularly those related to community organizations, youth associations, social groups, and professional institutions—whether for public services or commercial activities—constitutes a phenomenon of interest. It is significant because its progress is ongoing, shaping a form of public discourse that seemingly has no definitive conclusion.

Culture, in this context, is understood as a system of ideas or a conceptual framework that guides human behavior in social life. These values include piety, dignity, harmony, orderliness, mutual cooperation, deliberation and consensus, creativity, diligence, unity, togetherness, and respect. Such values form the foundation of social life and are regarded as noble and essential. A particular value may also apply to more than one sphere of life. According to M. J. Melalatoa, a prominent Professor of Anthropology at the University of Indonesia, these values constitute the "peak" of a tribal culture, representing the highest expression of that particular cultural system.

The cultural peaks of various ethnic groups throughout Indonesia collectively constitute the national culture. These elements give rise to actions and creative works within regional communities. Scholars have argued that a national culture must be distinct, of high quality, admirable, and capable of unifying the nation. From this perspective, it can be inferred that Indonesian culture is the product of the integration and synthesis of diverse regional cultures that have interacted over extended periods, ultimately forming a new cultural identity.

### **B. Social Change as an Impact of Communication and Interaction**

Social interaction and cultural development are in constant transformation, influenced by the evolution of human needs and the passage of time. Some changes occur rapidly, while others unfold more gradually. Cultural change may happen unintentionally, such as when a volcanic eruption, major flood, fire, or other natural disasters force a population to relocate. Such disruptions often stimulate shifts in lifestyle and interaction patterns, as widely discussed in sociological and anthropological studies.

Cultural change may also be deliberately initiated. For instance, international organizations often accompany technical or health assistance programs with efforts to influence local cultural orientations and worldviews. This phenomenon was notably observed in Aceh and Nias following the devastating earthquake and tsunami on December 26, 2004. The ensuing reconstruction involved global institutions and humanitarian organizations whose interventions—whether intentional or not—led the affected communities to adopt new patterns of thinking and behaving.

These transformations may trigger cultural shifts or syntheses between local cultural norms and the values brought by migrants, volunteers, or humanitarian workers. During such interactions, the urgency of survival may prompt local communities to abandon former norms and adopt the cultural patterns of newcomers. Communication serves as the principal conduit in these interactions, and as communication becomes central to social life, the processes of acculturation and assimilation inevitably emerge, gradually reshaping socio-cultural dynamics.

Over time, a new cultural pattern or social behavior develops, distinct from previous traditions. Although local cultural traits do not disappear entirely, they experience significant renewal. Acculturation and assimilation have long existed in human cultural history, but systematic acculturation processes intensified when Western European civilizations expanded into other parts of the world, influencing indigenous societies in Africa, Asia, Oceania, and the Americas.

In the 15th century, European nations established strategic centers across various continents, forming the basis of colonial administrations that reached their zenith in the late 19th and early 20th centuries. Alongside this expansion came efforts to spread Christian social doctrines. As a result, there are few remaining societies today that are untouched by elements of European culture.

While foreign cultural elements inevitably cause changes when introduced into another culture, it should be understood that culture itself is not static; it is always evolving. Even in isolation from external influences, cultural shifts occur naturally over time. Every culture provides individuals with a degree of autonomy, enabling them to introduce behavioral variations that may eventually be adopted collectively and become part of the cultural system. Environmental factors also evolve and require cultural adaptation. This perpetual evolution illustrates that cultural change is cyclical and ongoing.

### **C. Socio-Cultural Impacts of Communication Technology Development**

A prominent communication theorist, Everett M. Rogers, identifies four categories of media that have evolved within society and significantly influence human life. These are what he refers to as *New Communication Technology*, consisting of writing media, printing media, telecommunication media, and interactive communication media.

Given the dominant role and function of mass communication media in everyday life—particularly as a primary source of information, entertainment, and public discourse—Nurdin, in his book *Komunikasi Massa*, details several potential effects such media may generate within society.

The social impact of technological advancement—particularly in telecommunication and multimedia information—has profound implications for changes in organizational structures and social relations. The flexible nature and pervasive capacity of telematics to enter almost every aspect of human life lead to significant transformations. These changes manifest not only in ideological and socio-cultural dimensions, but also in political and security structures at both community and national levels.<sup>11</sup>

The scope of social impacts resulting from communication technology encompasses various dimensions, including the speed of innovation adoption, the utility of technology, its processes, and the long-term effects on communication practices in society. In the context of communication processes, the term *effect* refers to behavioral changes at the individual level—such as knowledge, attitudes, and actions—triggered by communication message transmission.

Rogers further argues that the impact of communication technology concerns changes at both the individual and social system levels, arising from the acceptance or rejection of innovations. According to Rogers and Parker, several potential risks emerge from these technological developments, including:

- The emergence of monopolies in managing and utilizing information

- Unequal distribution of information
- Information overload or pollution
- Invasion of personal privacy
- Copyright-related issues<sup>12</sup>

Based on these concerns, the revolution in communication technology generates both anxieties and expectations. One concern is that representative governance and public participation may be undermined. Certain groups may acquire disproportionate influence by exploiting digital tools to categorize individuals for targeted political persuasion through methods such as direct mail campaigns. Interactive systems, including two-way telephony or cable television polling, may also introduce biases, resulting in poor decision-making processes.

Another concern is the potential for psychological and cultural hazards. The development of high-technology communication systems encourages specialization of competencies and increases the burden of individual responsibility within an increasingly complex information environment. As technical knowledge spreads within society—especially among decision-makers—technological advancement may provoke anti-technology, anti-science, and ultimately anti-knowledge sentiments.

Rogers classifies the socio-cultural impacts of communication technology into several typologies:

1. Desirable Impact vs. Undesirable Impact  
Refers to whether an innovation functions effectively (or fails to function) within individuals or social systems.
2. Direct Impact vs. Indirect Impact  
Direct impacts occur when individuals or systems respond immediately to innovations, whereas indirect impacts appear gradually over time.
3. Anticipated Impact vs. Unanticipated Impact  
Anticipated impacts are predictable because members of a social system are aware of an innovation. Unanticipated impacts occur when changes arise unexpectedly, often due to unfamiliar innovations.

#### **D. Benefits of Technological Change for Society**

One of the positive outcomes of social change is the advancement of science and technology (IPTEK), which enhances the quality of life across various sectors, including education, economics, social structures, and cultural development.

However, technological and social change may also produce negative impacts, such as widening social inequality. Certain forms of social change result in regressions rather than progress, contributing to societal decline and disparities among community groups.

## **4. CONCLUSION**

Social change is a transitional process that alters the patterns of community life and occurs continuously due to the dynamic nature of society, which is inherently capable of transformation. It encompasses the various changes experienced by individuals within a community as well as shifts occurring in social institutions that subsequently influence the broader social system. These changes include transformations in values, customs, cultural practices, social attitudes, and behavioral patterns among groups in society. A number of social change theories are highly specific and elaborate, focusing on particular aspects of society or certain institutional contexts.

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