# Online Communication in the Digital Age Prof. Rashmi Gaur Department of Humanities and Social Sciences Indian Institute of Technology Lecture – 04 Interpersonal Communication Theories of CMC

Good morning dear friends and welcome to this module. In the previous module, we had explored how computer mediated communication can support socio-emotional relationships. Today, we shall explore different theoretical approaches within the realm of interpersonal communication. As previously explained in the very first module of the course, our course will begin the discussion of interpersonal communication before delving into intrapersonal modes of communication. This pedagogical strategy follows a functional approach placing practical real world applications at the forefront to establish a fundamental grasp over related issues. This progressive learning model capitalizes on the foundational knowledge of interpersonal communication as a springboard to comprehending the more intricate concepts associated with intrapersonal communication which have recently emerged in the digital era.

## Why Interpersonal Communication?

- Interpersonal communication serves as the foundation for more complex forms of communication, involving the exchange of information, ideas, and emotions between/amongst individuals.
- In recent years, the field of intrapersonal communication has evolved to include more detailed concepts related to identity shifts and identity formation.
- We encounter the complexities of human interaction, including how interactions shape our self-concept, emotions, and identity.
  - These concepts have become integral to understanding how individuals perceive and communicate with themselves.





Interpersonal communication serves as a foundation for more complex forms of information involving the exchange of information, ideas as well as emotions between and amongst several interactants. We also find that in the recent years, the field of intrapersonal communication has also evolved to include more detailed concepts related to identity shifts and identity formation. It has developed our intrapersonal communication into more porous boundaries and therefore, an understanding of issues

related with interpersonal communication would prepare us better to understand these intricacies of intrapersonal communication in today's digital mediums. We encounter the complexities of human interaction including how interactions shape our self-concept, emotions and identity.

And these concepts have become integral to understanding how individuals perceive and communicate with themselves. Let us look at certain aspects related with digital means of interpersonal communication which have resulted into several complexities which were not realized earlier. We begin by distinguishing between digital natives and digital immigrants. The term digital natives is used for those individuals who have grown up along with the technology including an immediate exposure after their birth to video games, personal computers and the internet which have become an integral part of their lives and also of their process of growth as a teenager and then as an individual. While different people may have varying opinions on the exact age cut off for being classified as a digital native, most commonly consider that those people who have been born around or after 1992's fall into this category.

#### **Digital Natives**

- Digital natives are individuals who have grown up with technology, including video games, personal computers, and the Internet, as an integral part of their lives.
- While different people may have varying opinions on the exact age cutoff for being classified as a digital native, most commonly consider those born around or after 1992 to fall into this category.
- Digital natives primarily rely on specialized websites for information, possess confidence in their technological abilities to accomplish specific tasks, and are well-versed in technical terminology and jargon, particularly after acquiring knowledge.



#### DIGITAL NATIVES

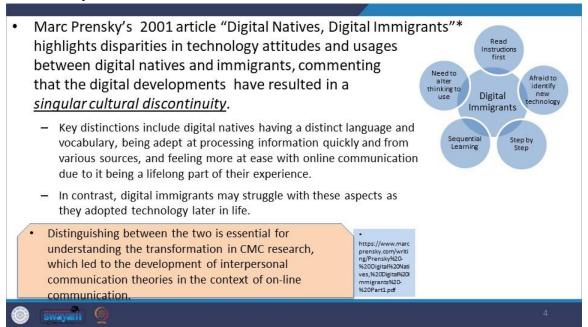
(Source: ww.medium.com)

- Born during or after the digital age
   Always on, attached to a phone or other device
- Intuitive learners
- Multitask and rapid task-switch
- Extremely social
- Multimedia oriented



Digital natives primarily rely on specialized websites for information, possess confidence in their technological abilities to accomplish specific tasks and are well versed in technical terminology and jargon particularly after acquiring some knowledge. Digital natives are said to be born with a digital DNA. In comparison, the other term digital immigrants suggests those individuals who are adopting and incorporating technology into their lives at a later stage particularly those people who did not have easy access to digital technologies during their early and formative years. They tend to learn media and related tools more slowly in comparison and might also be resistant about embracing new technologies as their daily habits. Mark Prensky's 2001 article

which was published under the heading of "Digital Natives, Digital Immigrants" highlights disparities in technology, attitudes and usages between digital natives and immigrants commenting that the digital developments have resulted in a singular cultural discontinuity.



Key distinctions include digital natives having a distinct language and vocabulary, being adept at processing information through technological modes and means quickly and from various parallel processes, feeling more at ease with online communication due to it being a lifelong part of their existence. In contrast, digital immigrants may struggle with these aspects as they adopted technology at a later stage of their life. Distinguishing between these two is essential for understanding the transformation in CMC research also. It led to the development of interpersonal communication theories in the context of online communication. In the early days of internet research, we find that most scholars were digital immigrants and they had to adapt to internet which was introduced when they were already relatively mature in age.

However, with the proliferation of personal computers in the 1990s, the younger generation of researchers began to approach CMC from the perspective of digital natives as they had integrated technology into their daily lives, particularly in interpersonal contexts. This shift in mindset contributed to a more nuanced understanding of CMC and its role in interpersonal communication.

- Interpersonal communication involves interactions between at least two people, enabling them to develop a meaningful understanding and potentially build a relationship based on their individual characteristics.
- This form of communication is considered socioemotionally rich, as it fosters perceptions of relational closeness, understanding, and empathy.
- Interpersonal communication has a long-standing tradition of study within the field of communication and is integral to maintaining valuable relationships with friends, family, and colleagues.

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Interpersonal communication involves interactions between at least two people, if not a small group, enabling them to develop a meaningful understanding and potentially build a relationship based on their individual characteristics. This form of communication is considered socio-emotionally rich as it fosters perceptions of relational closeness, understanding and empathy. Interpersonal communication has a long-standing tradition of study within the field of communication research and is integral to maintaining

These relationships may also deepen and broaden as individuals gradually learn more about each other. Scholars along with regular internet users have long acknowledged that CMC can indeed foster a sense of closeness. Interpersonal communication is highly valued for its role in education, community building, political engagements and relationship development as well as several other fields. Early theories had initially dismissed CMC as a substitute for face-to-face interaction in interpersonal communication. But definitely by the mid 1990s, scholars had begun to anticipate how online communication could be just as emotionally rich and interpersonal as in-person face-to-face interaction.

The concept that technology could enhance interpersonal communication emerged shortly after the CFO paradigm which we have discussed earlier and this resurgence of the theory of electronic propinquity ultimately contributed to a deeper understanding of online interpersonal communication.



- Propinquity is the perception of relational or psychological closeness felt toward another person.
  - Various factors like interpersonal attraction, homophily, and social attraction have been used to
    measure this psychological closeness, but they all essentially assess how close you feel to
    another person on a psychological level.
    - The way you feel during conversations with a parent compared to a stranger is likely different, even if the topics are the same. This difference in feelings is attributed to the concept of propinquity.



 Initially, the concept of propinquity primarily focused on offline interactions through analog channels like telephones and closed-circuit audiovisual conferences.

Source: www.quora.com

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So, what is electronic propinquity? Propinquity is the perception of relational or psychological closeness felt toward another person. Various factors like interpersonal attraction, homophily and social attractions have been used to measure this psychological closeness, but they all essentially assess how close you feel to another person on a psychological level. The way you feel during conversations with a parent compared to your conversation with a stranger is highly different from each other even if topics are the same. The difference in feelings is attributed to the concept of propinquity.

Initially the concept of propinquity primarily focused on offline interactions through analogue channels like telephones and closed circuit audio visual conferences. Research has consistently shown that physical proximity influences interpersonal communication as we tend to spend more time with those who are closer to us whether they are friends, colleagues or family. Earlier it was interpreted in terms of geographical location only in terms of physical proximity. Virtual distance remains to be a powerful predictor of interaction, friendship and influence even today perhaps, but introduction of instant messaging and video conferencing and continuity of connectivity allows a notional virtual propinquity to work on virtual relationships where people are connected virtually.

In 1978, psychologist Philipe Korzenny proposed the concept of "electronic propinquity," suggesting that electronic media could enable communicators to experience a sense of closeness similar to face-to-face interactions.

 At that time, electronic media were considerably more limited than they are today, with the Internet still in its early stages, primarily accessible to the military and a few academics.

 Despite these limitations, Korzenny's theory of electronic propinquity (TEP) relied on factors that were not specific to any particular medium and could continue to guide research as new technologies like the Web, Instagram, and Zoom emerged, much later.

Figure 1: Electronic Propinguity Elements

In 1978 psychologist Philip Korzenny had proposed the concept of electronic propinquity. It suggested that electronic media could enable communicators to experience a sense of closeness which is similar to face to face interactions. At the time when Philip Korsanyi had initially suggested the theory, electronic media were considerably more limited than what they are today. The internet was still in its early stages and it was primarily accessible to the military and a few academic and research institutions only. Despite these limitations we find that Korzenny's theory of electronic propinquity relied on factors that were not specific to any particular medium and could continue to guide research as new technologies like the web, Instagram and Zoom etcetera emerged decades later. The diagram below suggests what are the electronic propinquity elements.

The figure here originates from a 2017 study that had examined the application of electronic propinquity in ICT integrated hospitals in Malaysia and the communication among medical doctors using new media sources. It visually highlights the current relevance of the electronic propinquity theory aiding us in identifying the components of electronic propinquity within new media.

# Theory of Electronic Propinquity

- The theory of electronic propinquity (TEP) outlines specific factors that influence the psychological perception of closeness with a communication partner.
- These factors include channel bandwidth, mutual directionality, task complexity, communication skills, communication rules, and available media choices.
- Bandwidth, one of these factors, refers to a channel's capacity to carry multiple cues, similar to the concept of a "rich" channel in Media Richness Theory (MRT).
  - For instance, a high-bandwidth channel like a Skype audiovisual conference allows verbal and nonverbal communication, including facial expressions and text, fostering a greater sense of psychological closeness.

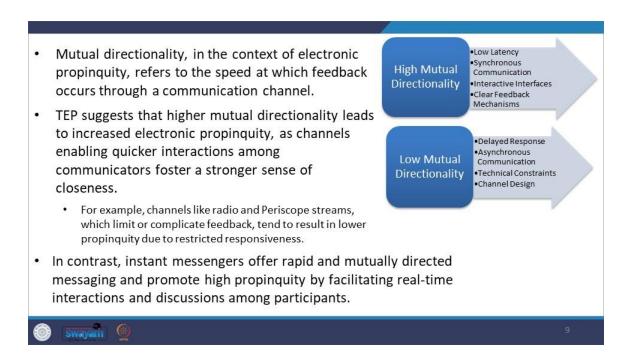


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For instance, a high bandwidth channel like a Skype audio visual conference allows verbal as well as nonverbal communication including facial expressions in text fostering a greater sense of psychological closeness. In the framework of the theory of electronic propinquity, a phone call despite providing vocal and temporal cues is considered to offer a modest level of bandwidth. This means that while it allows for some audio interaction and timing related information, it falls short of creating the same depth of psychological closeness as communication channels with higher bandwidth. TP's perspective on bandwidth underscores the significance of having a broader array of cues and channels to facilitate more profound socio-emotional connections in digital interactions.



Mutual directionality in the context of electronic propinquity refers to the speed at which feedback occurs through a communication channel. TEP suggests that higher mutual directionality leads to increased electronic propinquity as channels enabling quicker interactions among communicators foster a stronger sense of closeness. For example, channels like radio and periscope streams which limit or complicate feedback tend to result in lower propinquity due to restricted responsiveness. In contrast, instant messengers offer rapid and mutually directed messaging and therefore, promote high propinquity by facilitating real-time interactions and discussions among participants. Several factors impacting electronic propinquity are related to individual user needs and interactions including task complexity, communication skills and communication rules. Propinquity tends to decrease as users engage in complex tasks which involve intricate or involved interactions.

When users are involved in complex tasks, they allocate more time to processing procedural and task related communication and thus reducing the attention given to socio-emotional cues. It results in lower levels of propinquity. For example, during a video conference to discuss a detailed budget, participants shall focus on financial data only leaving little time for social interactions. In contrast, in less complex or routine tasks, participants may have more time for relational or off-topic discussions leading to a sense of increased propinquity.

- Diversity in media options allows for greater flexibility and variety in the messages sent and received. Therefore, the final two aspects in the Theory of Electronic Propinquity (TEP) deliberate on the communication rules, and available media.
- They are based on the structural and technical aspects of digital communication.
- "Communication rules" refer to the guidelines, both technological and social, that govern interactions.
  - When there are many communication rules in place, communicators may feel constrained by these rules during their interactions, leading to a more structured or formal communication style, i.e., less propinquity.



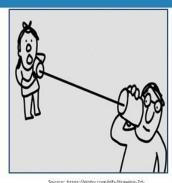
Source: www.giphy.com



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Diversity in media options allows for greater flexibility and variety in the messages sent and received. Therefore, the two final aspects in the theory of electronic propinquity deliberate on the communication rules and available media. These aspects are based on the structural and technical aspects of digital communication. Communication rules refer to the guidelines both technological and social that govern our interaction. When there are many communication rules in place, communicators may feel constrained by these rules during their interactions leading to a more structured or formal communication style that means it would result automatically into less propinquity. On the other hand, in those media and online environments which have fewer communication rules, users can send a broader range of messages fostering greater diversity in the sent and received messages.

- Sheer availability of communication media imposes restrictions as to which medium will be considered satisfactory in terms of perceived propinquity.
- When there are numerous communication rules, communicators might feel less close due to the more structured or formal nature of interactions.
  - For example, Facebook's social norms dictate interactions with known contacts, while the Bumble dating app allows only females to initiate communication, limiting the scope of communication.
- On the other hand, propinquity decreases when there are more available media choices.



Source: https://giphy.com/gifs/drawing-2d-



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Sheer availability of communication media imposes restrictions as to which medium will be considered satisfactory in terms of perceived propinquity. When there are numerous communication rules, communicators might feel less close due to more structured and formal nature of interactions. For example, Facebook social norms dictate interactions with known contexts while the Bumble dating app allows only females to initiate communication limiting the scope of communication. On the other hand, propinquity decreases when there are more available media choices. This point might seem counterintuitive at first, but it means that with fewer media options individuals are forced to make the best use of the limited tools they possess for interpersonal communication.

This can lead to more careful construction of messages resulting in an increased sense of propinquity. This phenomenon is often observed when a family communicates with those members who live in areas with limited online or digital availability. Their interaction is more thoughtful and better structured to maximize their communicative and relational potential. Also, individuals with strong communication skills have the potential to enhance the propinquity of a medium and their ability to interpret cues, particularly the nonverbal ones in the messages which are being conveyed by any medium allows them to effectively use the available bandwidth to encode and understand messages resulting in a greater sense of closeness with the communication partner.

#### **Tests of Electronic Propinquity**

- Korzenny initially introduced the Theory of Electronic Propinquity (TEP) in 1978.
- However, when he tested the theory in 1981, he had to encounter disappointment as none of the proposed relationships were supported.
  - The reasons for this initial test failure remain somewhat unclear.
    - It could have been due to the limited range of media available at the time, with the 1978 manuscript only reaching closed-circuit camera feeds, or more likely, the limited engagement of the public with electronic interpersonal media.
- Nevertheless, this setback led to TEP being largely ignored by media and computer-mediated communication (CMC) researchers, and it remained dormant for around three decades.



Source: www.giphy.com



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Korzenny had introduced the theory of electronic propinquity in 1978. However, when he tested the theory in 1981, he had to encounter a deep disappointment as none of the proposed relationships were supported. The reason for this initial test failure remains somewhat unclear. It could have been due to the limited range of media available at that time with the 1978 manuscript only reaching closed circuit camera feeds or more likely the limited engagement of the public with electronic interpersonal media at that time. However, this setback led to TEP being largely ignored by media and computer mediated communication researchers and it remained dormant for about 3 decades. In 2008, Walther and Bazarova reexamined the theory of electronic propinquity bringing back into the spotlight.

Their study utilized experimental groups controlled for alternative communication media and offered substantial support for TEP's principles. Specifically, their findings confirmed that bandwidth and media choice significantly influenced electronic propinquity when small groups used multiple modes of mediated interaction that is text, audio, as well as video channels. The greater bandwidth led to a heightened sense of social closeness among group members. Conversely, groups assigned complex tasks reported decreased propinquity levels after their introductions.

- Walther and Bazarova's 2008 experiment based research, published with the title "Validation and application of electronic propinquity theory to computer-mediated communication in groups"\*, validated the TEP and provided insights into the earlier findings related to CMC.
  - Before 1992, the prevailing belief was that CMC was a minimalistic form of communication lacking richness.
  - However, subsequent research challenged this view, suggesting that CMC could enable meaningful interpersonal exchanges.
- TEP, as supported by Walther and Bazarova, explained how even in the absence of face-to-face (FtF) nonverbal cues, online communication allowed people to feel emotionally and psychologically close to one another.



\*https://journals.sagepub.com/doi/10.1177/0093650208321783



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Walther and Bazarova's 2008 experiment based research was published with the title Validation and Application of Electronic Propinquity Theory to Computer Mediated Communication in Groups. It validated the TEP and provided insights into the earlier findings related to CMC. Before 1992, the prevailing belief was that CMC was a minimalist form of communication and lacked in richness. However, subsequent research challenged this view suggesting that CMC could enable meaningful interpersonal exchanges. TEP, as supported by Walther and Bazarova, explained how even in the absence of face-to-face nonverbal cues, online communication allowed people to feel emotionally and psychologically close to one another. The limitations imposed by computer mediated channels actually encouraged users to make better use of the available CMC tools as they were quicker and more handy so to say.

In order to foster psychological closeness in their online interactions, people fell back on their creativity. TEP challenged the notion that CMC was a minimalistic form of communication and demonstrated that it has the potential to foster meaningful relationships and emotional connections. People using CMC channels developed new ways of conveying emotions and building relationships such as through text, emoticons and other online communication tools.

### Social Information Processing Theory (SIP)

- SIP, introduced by Joseph B. Walther in 1992, suggests that people can form deep, socioemotional relationships through computer-mediated communication (CMC).
- SIP is based on the idea that people are motivated to create rich and profound impressions of each other, regardless of the communication medium.
- It highlights that CMC allows users to create rich impressions of each other, promoting psychological closeness.
- SIP sheds light on why individuals use CMC for interpersonal purposes, even if they are not consciously aware of it.



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Social Information Processing Theory, popularly known as SIP, was introduced by Joseph Walther in 1992. It suggests that people can form deep and socio-emotional relationships through computer mediated communication. This theory is based on the idea that people are motivated to create rich and profound impressions of each other regardless of the medium of communication. It highlights that CMC allows users to create rich impressions of and about each other promoting psychological closeness. It also sheds light on why individuals use CMC for interpersonal purposes even if they are not consciously aware of it. As CMC continues to evolve with new technologies and platforms, SIP remains relevant in understanding how people adapt and employ these mediums to fulfill their innate need for social interaction, emotional connection and the development of deep socio-emotional relationships. It serves as a reminder that human communication is not bound by the limitations of the medium, but rather fueled by our intrinsic desire to connect with others.

#### Time in SIP

- Social Information Processing Theory (SIP) predicts that, over time, users adapt to the limited cues available in CMC and use them to form rich interpersonal connections.
- The primary mechanism of SIP is time, but it's not just about the passage of minutes or days; it's about the sequential exchange of interactive messages.
- Building a relationship through CMC requires multiple message exchanges that reply to each other and advance the communication.
- Time, in the context of SIP, is critical because online communication essentially takes longer than face-to-face communication.



Source: www.misemjay.home.blog





Social Information Processing Theory predicts that over time users adapt to the limited cues available in CMC and use them to form rich interpersonal connections. The primary mechanism of SIP is time, but it is not just about the passage of minutes or days, it is about a sequential exchange of interactive messages. Building a relationship through CMC requires multiple message exchanges that reply to each other and advance the communication. Time in the context of SIP is critical because online communication essentially takes longer than face to face communication. Engaging in prolonged online interactions offers both individuals more chances to acquire, innovate and adjust to the various cues and messages that can be effectively conveyed through the medium of computer mediated communication.

#### Adapting Cues in SIP

- Social Information Processing Theory (SIP) addresses the challenge of communicating emotions and nonverbal cues in CMC, instead of face-to-face interactions.
- SIP suggests that users adapt to the limited cues in CMC over time, finding new ways to convey and interpret verbal cues that replace missing nonverbal cues.
  - Language plays a role in conveying emotions online. Users may subtly alter their language and word choice to communicate feelings, even when not explicitly discussing their emotional state.
- SIP initially focused on text-based CMC, but it remains relevant as communication includes audiovisual cues and multimedia.

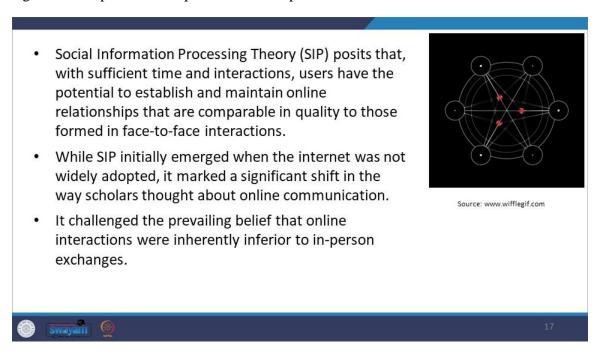






Social Information Processing Theory addresses the challenges of communicating emotions and non-verbal cues in computer mediated communication and comparing it to face to face interactions. SIP suggests that users adapt to the limited cues in CMC over time finding new ways to convey and interpret verbal cues that replace missing non-verbal cues. Language plays a role in conveying emotions online. Users may subtly alter their language and word choice to communicate feelings even when not explicitly discussing their emotional state. SIP initially focused on text based CMC, but it remains relevant as communication includes audio visual cues and multimedia also.

Profile photos and imagery can instill a sense of propinquity even before a direct communication begins. Emoticons are often used in CMC to compensate for missing non-verbal cues. Still the verbal content of a message often tends to have a more significant impact on interpretation in comparison to emoticons.



So, this theory posits that with sufficient time and interactions, users have the potential to establish and maintain online relationships that are comparable in quality to those formed in face to face interactions. While SIP initially emerged when the internet was not widely adopted, it did mark a significant shift in the way scholars thought about online communication.

It challenged the prevailing belief that online interactions were inherently inferior to inperson exchanges. In fact, some SIP research indicated that online relationships might even surpass face to face interactions, prompting Walther to propose a model suggesting that computer mediated communication could excel in surpassing the perception of face to face interactions. Social information processing theory was initially developed with a focus on text-based CMC as multimedia and platforms like Zoom, YouTube and Instagram did not exist in 1992. But SIP has proven to be robust and adaptable as CMC has now evolved to include audio-visual cues and multimedia elements.

## Mass Personal Communication

- Traditionally, communication theories divided communication into <u>mass</u> communication (one-to-many with minimal feedback) and <u>interpersonal</u> communication (one-to-one/small group with greater opportunities for feedback).
- New media platforms like TikTok, YouTube, Twitter, and blogs blur the lines between mass and interpersonal communication.
  - They enable masspersonal communication, where individuals use mass channels for interpersonal communication, interpersonal channels for mass communication, or both simultaneously.



Source: www.gorkhana.com

- Masspersonal communication describes the merging of mass and interpersonal channels and interactions.
  - It occurs when mass media is used to reach out to specific individuals or use interpersonal channels to communicate with a mass audience.



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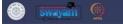
Traditionally, communication theories divided communication into mass and interpersonal communication. New media platforms like TikTok, YouTube, Twitter and blogs blur the line between mass and interpersonal communication. They enable mass personal communication where individuals use mass channels for interpersonal communication and interpersonal channels for mass communication or both simultaneously. Mass personal communication describes the merging of mass and interpersonal channels and interactions. This transformation in communication practices highlights the adaptability and versatility of new media platforms. It also underscores the evolving nature of communication in the digital age.

In the digital means, individuals have greater control over how they connect with others, the scale at which they would like to communicate and the level of personalization they can achieve. Mass personal communication exemplifies the blurring of boundaries between mass and interpersonal communication giving unprecedented flexibility to users.

- Social media, especially, has made masspersonal communication more accessible and prevalent.
- Research into the effects of masspersonal communication is emerging, and it's shown that creating messages in a masspersonal context can influence selfperception and relationship dynamics.
- Masspersonal communication has been explored in various contexts, including online education, relational communication, and social support on social network sites.
  - The rapid advancement of media tools challenges researchers to catch up with and comprehend the complexities of interactions in masspersonal communication, as it changes the nature of relationships and interactions.



Source: www. digitalmarketingtrends.in



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Social media especially has made mass personal communication more accessible and prevalent. Research into the effects of mass personal communication is emerging now and it is shown that creating messages in a mass personal context can influence self-perception and relationship dynamics too. Mass personal communication has been explored in various contexts including online education, relational communication and social support on social networking sites.

The rapid advancement of media tools challenges researchers to catch up with and comprehend the complexities of interactions in mass personal communication as it changes the nature of relationships and interactions. In relational communication, people navigate the challenges and opportunities of building and maintaining relationships within the context of mass personal interactions. Social network sites have become hubs for individuals seeking social support where users can both share their experiences with a wide audience and also engage in private conversations.

#### Conclusion

- The development of theories like SIP have contributed significantly to our understanding of how people relate to each other in the digital age.
- These theories provide insights into how we perceive and engage in online communication to establish meaningful relations.
- Understanding the technological and communicative differences between online and face-to-face interactions is valuable, even for digital natives.
- It allows for a deeper comprehension of mediated communication, which can be applied across various platforms and technologies as they continue to evolve.



Source: www.adamhardingwillis.com



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The development of theories like SIP have contributed significantly to our understanding of how people relate to each other in the digital age using digital means only. These theories provide insights into how we perceive and engage in online communication to establish meaningful relationships at the workplace and away from it.

Understanding the technological and communicative differences between online and face to face interactions is valuable even for digital natives. It allows for a deeper comprehension of mediated communication which can be applied across various platforms and technologies as they continue to evolve. In the next module, we shall further explore the elements of interpersonal communication. Thank you.