

THE HIERARCHY OF COMMUNICATION

**How to Effectively Leverage Multiple Communication
Media
to Increase Productivity and Gain Competitive
Advantage**

Consider for a moment how you communicate with someone important to you – a loved one, perhaps, or a close friend. Now think about how you would share very special news or even sensitive information with that person. Would you write a letter? Send an e-mail? Call them on the phone? Probably not. If all things were equal, you would want to look into that person's eyes, to pick up on the nonverbal cues of gaze, expression, posture – all elements of body language. A face-to-face exchange would maximize your ability to connect on an emotional level and to offer an appropriate response.

Now imagine a different scenario. You want to catch up with an old college buddy – relive good times and fill in the missing years. A phone call would serve you very well in this situation. Even an e-mail or a handwritten letter would not be inappropriate. Making an unannounced visit to the person's house, however, might be considered excessive given the circumstances.

Here's the point: In your personal life, you make hundreds of conscious decisions about how you're going to communicate with people. You make those decisions based on several factors, including how well you know someone, the kind of information that needs to be communicated and the types of media at your disposal. You choose wisely because you know your choices affect how you get along with people. You choose wisely because the quality of your relationships directly impacts the quality of your life.

How is it, then, that we forget this when we step through the doors of an office building? Why do we rely so heavily on certain forms of communication when we know others are more efficient, more appropriate or simply more persuasive? And why do we fail to think strategically about communication the same way we think about sales or marketing or branding?

Making conscious decisions about how employees communicate – with each other, with partners and with customers – can contribute greatly to an organization's success. A company that uses a true hierarchy of communication, with different media available for different needs, will improve productivity, facilitate problem-solving, reduce stress and build stronger, longer-lasting relationships with all of the stakeholders of the business – factors that contribute significantly to competitive advantage and to the bottom line.

The Nature of Information Exchange

Before a detailed discussion of communication hierarchies can occur, it's important to review how information is exchanged in face-to-face meetings versus meetings in which distance separates the participants. In a face-to-face exchange, information passes directly between two people with no medium, or transporting channel, required. Face-to-face is the most efficient form of communication because participants benefit both from the meaning of the words, as well as the meaning carried by body language, such as gestures and facial expressions. In fact, a recent Harvard/Columbia study showed a 38 percent increase in retention with face-to-face meetings. Just as important, the act of showing up also sends a powerful message. When people show up for a meeting, they are making symbolic expressions of commitment to the business and stakeholders with whom they are interacting.

The face plays a critical role in how two or more people communicate in such situations. Speakers use gaze, eye movements and expressions to “negotiate turn-taking, establish social control, reflect levels of intimacy and indicate understanding and agreement.”² As people are located farther apart, however, the face becomes less visible, and the amount people communicate declines rapidly.

According to Robert Kraut, a professor of social psychology and human-computer interaction at Carnegie Mellon University, two colleagues in an adjacent office communicate half as often as they would in the same office. If one moves around the corner, the frequency of communication falls by half again. If two are located on different floors, it’s cut in half again. ³ Professor Oscar Hauptman has found similar results in his work, reporting that after 50 yards, the probability of meaningful face-to-face communication is less than 5 percent.

Figure 1 shows this relationship.

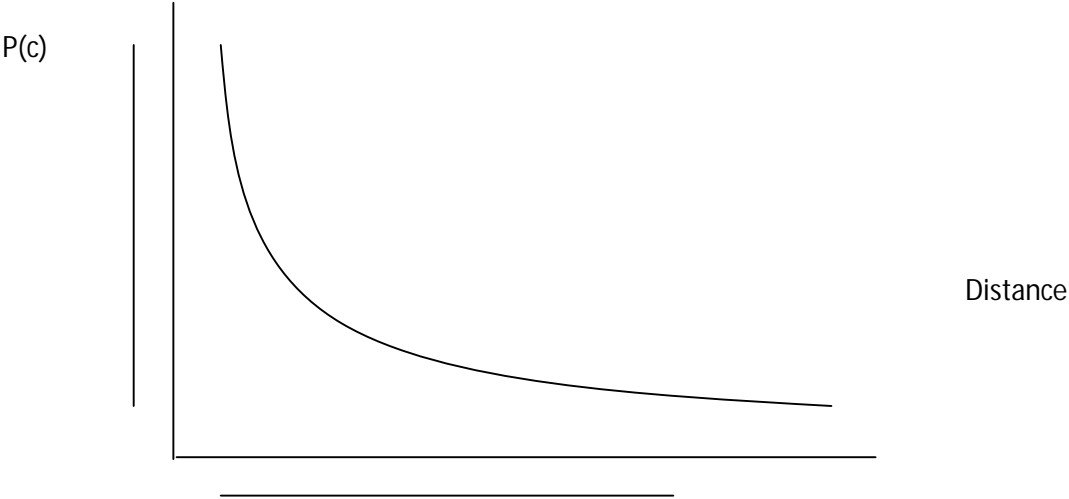


Figure 1. The probability of communication vs. distance.

As soon as people have to communicate over distances, a medium is required to transport the message. Some forms of mediated communication, such as e-mail and audioconferencing, can be fairly one-dimensional. Others, such as illustrated books and newspapers, add dimension by combining the printed word with photographs, diagrams and illustrations. And still others, such as videoconferencing, web conferencing and streaming, are true multimedia experiences that bring together sound, video and text to enhance the user experience and add multiple levels of meaning.

The Medium is the Message

In most organizations, several forms of mediated communication exist to help workers stay connected and productive. While many were implemented as point solutions to address specific needs, they must be considered now in a larger context that attempts to integrate the different forms of communication into a unified collaborative platform, with one layer building on another. In some ways, it's similar to how IT managers in today's data center must bring together a variety of disparate systems and technologies into a single, cohesive infrastructure.

Before an organization can make conscious decisions about which forms of communication should be used in certain situations, they must first understand the inherent benefits – and limitations – of each medium in question, as well as the type of relationship that exists between the sender and receiver, and the nature of the message being conveyed. The following list describes the six most common types of mediated communication used today.

E-mail. Electronic mail is the exchange of computer-stored messages between users on either public or private networks. It was one of the first uses of the Internet and is still one of the most popular, making up a large percentage of the traffic being transmitted over the Internet. In organizations, e-mail is often the most used machinemediated means of communication, used to support both social and strictly professional relationships.

Why is e-mail so popular? Because most people sit at or near a computer all day long, which means e-mail is instantly at hand to send or receive information. E-mail also overcomes boundaries of time and space, enabling users on different schedules or in different offices to communicate effectively. Finally, e-mail makes it possible to communicate simultaneously with more than one person and to attach electronic documents, images or files.

Of course, the ubiquity of e-mail has led to its overuse and, often, its inappropriate use. Because an e-mail message carries very little information about people's physical and social characteristics and because it cannot convey subtle gestures or nonverbal cues, it can be misinterpreted or misconstrued, creating conflict that would not arise in a face-to-face exchange. We've all faced miscommunications, at one time or another, when we've failed to consider our message from the recipient's perspective. For that reason, many researchers and business managers recommend not using e-mail for communications of a controversial or sensitive nature.

Instant Messaging. Instant messaging – or IM – is a near real-time exchange of text between two, or more, subscribers. It differs from ordinary e-mail in the immediacy of the message exchange and in the relative simplicity of keeping up a ‘conversation’. Because participants are part of a ‘buddy’ list, there is a strong sense of community and, in many cases, a strong sense of others that helps establish zones of effective communication. IM even allows users to accept or reject incoming messages, giving them a level of control that is similar to closing an office door to discourage unscheduled face-to-face meetings. IM is a good medium for sending non-controversial information to a large group of people.

Still, instant messaging is not appropriate in all situations or for all relationships. Two people with weak work ties might find the intimacy of a real-time chat session uncomfortable, while two people trying to solve a challenging issue might find the shorthand that often accompanies IM an impediment to the problem-solving process.

Audioconferencing. Business people have been using the telephone to communicate for decades. It’s convenient, simple to use and, with today’s voice mail capabilities, fairly flexible in terms of communicating even when other people are unavailable to speak. Best of all, an audioconference provides much more social presence than e-mail or instant messaging. Participants in an audioconference can use changes in tone of voice, pitch or inflection, as well as conversational pauses and processing sounds (“um” and “uh”), to negotiate turn-taking and to glean additional information not carried in the audio alone.

Unfortunately, the anonymity afforded by audio conferencing is its biggest drawback. In a recent survey conducted by RoperASW and sponsored by TANDBERG, 625 business professionals were polled to measure their attitudes and behaviors in regards to various meeting communication media, including audio and face-to-face meetings. What they discovered was that only 23 percent of respondents gave their full attention during audioconferences. Twenty-seven percent did other work, while 25 percent checked or wrote e-mail. Still others surfed the Web, played games and engaged in side conversations not related to the topic at hand.

The bottom line: Audioconferences, while they are quite useful in certain business applications, also make it easier for participants to engage in other off-task or off-subject activities.

Webconferencing with audio. Webconferencing provides an appropriate medium for incorporating certain visual elements into the flow of verbal communication, enabling participants to view a PowerPoint presentation, take a guided Web tour, or collaborate on documents with others. In many cases, webconferencing can even enable remote control of a participant's computer. Webconferencing differs from video or voice over Internet protocol in that it involves sharing data over a browser while the parties use a teleconference. It is a relatively inexpensive and effective technology for group collaboration, offering a variety of features that facilitate the meeting experience. Some of these include an agenda, a list of attendees, a whiteboard, polls, text chat, application sharing and website sharing. Some even have video capabilities.

Unlike participants in a videoconference, who look at each other, everyone in a webconference is focused on the material being presented on the shared screen. While the presentation is going on, any participant can send the presenter a question or comment in text, without interrupting the flow of the presentation. The speaker can then choose to deviate from the presentation and respond immediately or at the end of the session. A record of the comments and responses, along with the presentation itself, can be distributed immediately after the meeting.

However, webconferencing provides a similar environment to that of audioconferencing in terms of anonymity; and, therefore, also tends to facilitate participant 'multitasking'. Depending on the nature of the message and the level of participant attention required, this can be a drawback of choosing audio or webconferencing as the communication medium. Additionally, the RoperASW study found that only 5 percent of respondents felt that audio or Web communication is best for building trust among participants. For this reason, audio and web conferencing are not ideal for building relationships or facilitating teamwork.

Streaming. Streaming, or webcasting, delivers high-impact, rich-media messages to anyone with a PC and a Web browser. The technology takes audio and video files and transmits them efficiently over the Internet or a corporate intranet so users don't have to wait to download large files before seeing video or hearing sound. In a live, or realtime, stream, participants are directed to a specific URL at a scheduled time, and everyone views the event simultaneously. In an archived, or on-demand, stream, the event is digitally encoded and stored for future viewing. Both scenarios can consist of audio and video content. Audio streams enable users to hear the speaker and see presentation materials. Video streams enable users to see the speaker and

presentations. Multiple speakers and slide shows can be added to complete the event.

With streaming as an important component of a collaborative solution set, organizations are able to reach more employees, partners, customers and investors with the key messages they need to deliver. But the technology is not without its drawbacks. Streaming requires that users have software 'players' that enable them to see the presentation. While these media players come with most PC systems, some users will not have the right software, or the right version of the software, and thus will not be able to enjoy the presentation without some effort. Also, archived streams don't have the immediacy of a live broadcast, and they require that users be motivated to actually download the stream and view it. Most importantly, however, streaming is primarily a one-way communication – from presenter to audience. If a topic requires interaction among participants, or even dialog between speaker and participant outside the scope of a Q&A session, streaming is not the most appropriate mode of communication.

Videoconferencing. Videoconferencing is a means of conducting a live conference that provides a reasonable facsimile of a face-to-face meeting between two or more participants at different sites. The technology utilizes computer networks to transmit audio and video data to all participating sites. Videoconferencing also provides a way to share other media, including videotapes, whiteboards, and computer programs such as PowerPoint, over a distance.

For more and more organizations videoconferencing is being considered a good alternative not just to face-to-face meetings, but to audio or e-mail communications, as well. That's because video offers all of the unique benefits of face-to-face communication without the hard and soft costs required to get two people in the same room at the same time. With videoconferencing, participants can:-

- Show work-related objects, such as devices or products, during a meeting
- See whether others are engaged, paying attention and responding appropriately to the ideas and information being presented
- Have a strong presence without ever saying a word
- Participate in fractionated talk where a larger group breaks up into two or more smaller groups that carry on simultaneous, parallel discussions that further the decision making process.

With that said, videoconferencing should not be adopted as a replacement for face-to-face communication. Face-to-face is still the most appropriate method to start business relationships; and, in many Asian countries, it's the only way to do business.

According to Usha Haley, a business professor at the University of Tennessee:

“Business relationships in China and Southeast Asia are based on trust and evolve from extracting information through variously textured means, including most importantly face-to-face interactions.”

And, of course, face-to-face is still most appropriate for tasks requiring greater interpersonal delicacy or for communicating difficult messages. For example, the subtle give-and-take that occurs during salary or contract negotiations often progresses more smoothly when both parties meet in the same room. However, when face-to-face communication is not available or feasible, videoconferencing produces the next best result. Discussions that involve complex issues also benefit from face-to-face, or simulated face-to-face interactions, as do decisions that must be made rapidly to accommodate an impending deadline.

Figure 2 compares the various forms of mediated communication with face-to-face, clarifying the advantages and disadvantages of each.

	Face-to-face	Audio + Video	Streaming	Web + Audio	Audio-only	Instant Messaging	E-Mail
Effectively communicates nonverbal cues	3	3	3				
Ideal for object-oriented discussions	3	3	3	3			
Easy to conduct over great distances		3	3	3	3	3	3
Ideal for kicking off new relationships	3						
Ideal for building rapport and trust	3	3					
Communicates physical and social traits	3	3	3				
Ideal for overcoming cultural and language barriers	3	3					
Effective for sensitive information	3	3					
Communication can occur when one party is unavailable			3		3		3
Offers a high degree of interactivity	3	3		3	3	3	
Supports fractionated talk	3	3		3			
Enables group problem-solving	3	3		3	3	3	

Figure 2. Comparing various forms of mediated communication with face-to-face communication.

Building a Pyramid to Build Relationships

Clearly, organizations have many tools at their disposal to communicate and collaborate across the extended enterprise. The big question, of course, is how to leverage these tools to maximize their benefits and, ultimately, the ability of the organization to communicate effectively. As Andrew Davis of Wainhouse Research says, the enterprise is driven by its ability to make good decisions, and decision-making is enhanced by communications, and communications are enhanced by a comprehensive package of tools and technologies, thoughtfully applied.

One thoughtful approach would be to organize communication types based on cost. This is the traditional way of thinking about a communication hierarchy because all organizations are driven by the bottom line. But it's not necessarily the most appropriate, especially if you make the distinction between the costs associated with a particular medium versus the value that medium brings to the overall communication experience.

How, then, do you measure value? In communication, the amount of nonverbal language inherent in a particular medium determines its value. Indeed, researchers believe that between 50 percent and 90 percent of a message is conveyed through cues, signals or symbols. Cues are hints from one person that tell another person to begin a specific speech or action. Signals are movements that communicate needs, feelings and desires. And symbols are representations of an event, action, object, person or place that can be used to communicate about the event, action, object, person or place.

According to the Social Presence Theory, the more nonverbal communication systems users have in a certain medium, the more social presence they will experience. In other words, the more a medium approaches face-to-face, the richer the communication. That makes videoconferencing, which simulates a face-to-face interaction, richer than the telephone, which is richer than instant messaging, which is richer than e-mail.

Obviously, organizations must weigh the costs of using a particular medium against the richness of communication afforded by it. Trying to make every meeting a face-to-face interaction would be cost-prohibitive, whereas relying fully on e-mail would cause confusion and erode relationships. Instead, a more balanced approach should be taken with a communication program to make it both cost-effective and optimized for every kind of relationship. For example, brand-new relationships should see more face-to-face meetings and more videoconferences – i.e., communications rife with nonverbal language – to build trust and rapport. As relationships mature, other types of mediated communication can be used to supplement the face-to-face interactions. However, even more established relationships deteriorate over time without the face-to-face interaction afforded by visual communication.

Indeed, in one study of communication among members of a university research group, it was shown that professionals who have strong work ties communicate more frequently, exchange more kinds of information and use more types of media than professionals with weaker ties. For these individuals, various forms of mediated communication, such as videoconferencing, fax and e-mail, are key elements in an overall communication spectrum that also includes scheduled and unscheduled face-to-face meetings (Figure 3).

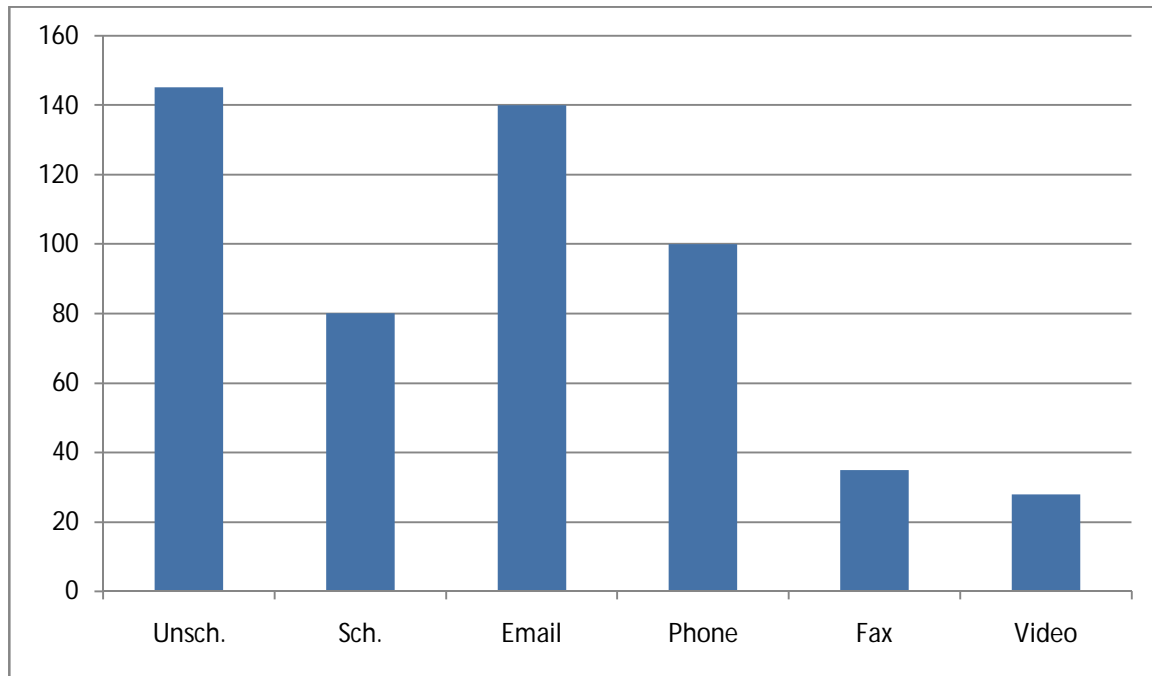


Figure 3. Mean annual frequency of communication per medium for workers in a university research group.

One thing the above study proves is that, even in established relationships, some form of face-to-face communication is required. According to researchers at Agilent Technologies and AT&T Research Labs, communication zones degrade over time. 9 They define a zone as “a potentiality for productive communication between two people,” a “fragile field of connection that persists only with careful attention.” They go on to say that a regular program of ‘seeing’ is crucial to keep these zones intact and healthy, which makes ongoing face-to-face, or simulated face-to-face, communication desirable.

we see in organizations that communicate effectively, then, is the use of multiple types of media, with the richest communication tools used to cultivate new business relationships and to deliver sensitive, controversial or highly complex messages (defined from the receiver’s perspective!). Generally, the former set of tools is used less frequently than the latter, but this is not always the case, especially when relationships need reinforcement or rejuvenation. If we were to illustrate this hierarchy of communication, it would look like the pyramid shown in Figure 4. Notice that face-toface and videoconferencing – the forms of communication with the greatest social presence – form the top of the pyramid, while instant messaging and e-mail – the forms of communication with the least social presence – form the base of the pyramid. Newer relationships, as well as complex or sensitive messages, require communications mediums that reside higher in the pyramid structure in order to be effective.

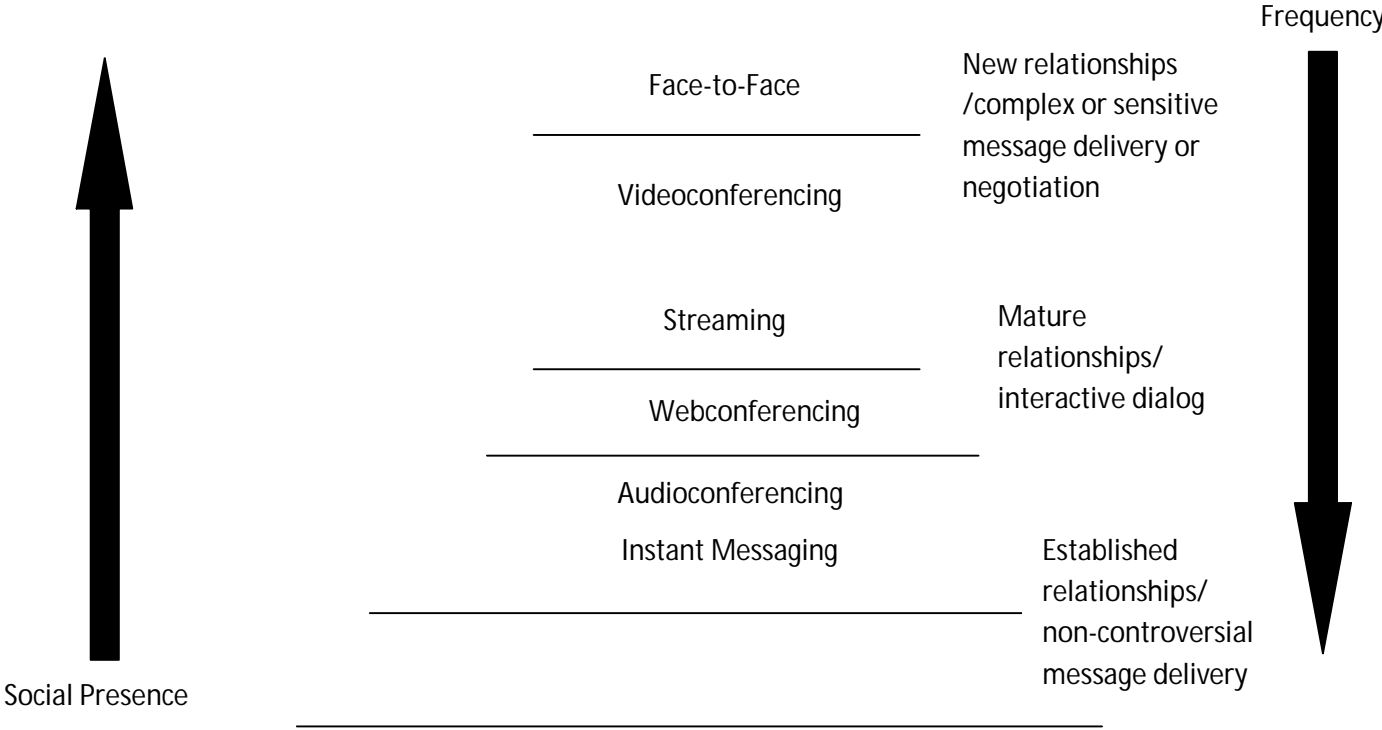


Figure 4. The hierarchy of communication.

Chief Collaboration Officer

Information exchanges within organizations are, by and large, social phenomena.

That means communication doesn't just transmit raw data – it also transmits information about people's physical and social characteristics, as well as social positions. The degree that this social subtext affects successful communication depends on a variety of factors.

For example, two people with strong ties may communicate quite differently than two people with weak ties, or two people initiating a new relationship. Similarly, communicating a sensitive or controversial message successfully requires far more visual data than does a routine announcement or information exchange.

For this reason, face-to-face communication should be combined with other media in a conscious and strategic effort to maximize creativity, efficiency, trust and rapport. Mediated communication should not be embraced as a replacement for face-to-face interactions, but as complementary solutions that can extend possibilities and opportunities.

For all of these reasons, every organization should appoint a Chief Collaboration Officer – a steward, if you will, to oversee all aspects of a communication strategy. The CCO would work with IT to develop and integrate the appropriate infrastructure to facilitate communication through multiple channels, but he or she would also work with the business community to ensure its members picked media thoughtfully and consciously based on a specific situation or need. One of the primary goals of the CCO would be to reinforce the concept of communication as a human endeavor and, as such, one whose ultimate goal is to build, nurture and extend relationships.

When this happens, organizations will see a higher percentage of successful communication, both internally and externally, which in turn will lead to increased productivity and greater competitive advantage.

ENDNOTES

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