

## Paradoxical Communication that Prevents Digital Transformation

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### Introduction

In order to meet the challenges of increasingly dynamic and volatile times organizations have to combine information and information technologies and transform how they do business. One such technology they can use is Digital Transformation. Digital transformation (DT) is “a process that aims to improve an entity by triggering significant changes to its properties through combinations of information, computing, communication, and connectivity technologies” (Vial, 2019). Literature related to DT provides great promises to organizations that are able to transform successfully. Iansiti and Lakhani (2014) claim that if the organizations can establish the required infrastructure DT creates unprecedented replication opportunities at almost zero marginal cost. Greenstein, Lerner, and Stern (2013) claim that organizations can transform social interactions by gaining new methods of accessing data and information. This way organizations can transform how people interact so they can facilitate the emergence of new opportunities. As market actors adapt to changes they can keep their existing competitiveness or gain a competitive edge by adopting to changing rules (Pigni et al., 2016; Weill & Woerner, 2013).

Against all the promises of DT, many companies are struggling with the transformation (McConnell, 2015). Success rates in achieving the actual implementation are around 30 percent (Bucy et al., 2016). When we look at the literature there are several important issues associated with Digital Transformation (DT) that prevent successful transformation and a plethora of corresponding advice to make DT efforts successful. Table 1 provides a short summary of the issues found in the literature and the given advice regarding the issue.

**Table 1.** Issues and advice regarding digital transformation

Issue	Advice
The definition of Digital Transformation is vague and unclear.	What is important is that the key stakeholders should have a shared understanding and common goals. They should understand that digital transformation is a continuous process.
DT is a strategic undertaking.	There should be a clear strategy not only for the DT but also for the organization as a whole.
DT threatens existing businesses and business processes.	Top management should be aware of the threats that digital transformation brings about for the existing business. They should find win-win solutions for everyone.

Purely functional focus and silo thinking prevent DT.	Digital transformation requires collaboration between different functions and actors. The top management should facilitate digitalization and share their knowledge. Organizational silos should be brought down because digital works across disciplines and departments.
Digital transformation gives power to the man at the top.	The leader should have a clear focus on tangible performance while simultaneously exploring different approaches. Management must create transparency, open dialogue, and education. They should also be clear that some of the jobs in the organization are going to be replaced.

In this chapter, we would like to point out a more fundamental issue that leads to the failure of DT initiatives. If what we are suggesting is valid then solutions developed to implement the advice above would lead to more failures. In order to better understand this fundamental problem, DT efforts can be viewed as a part of a wider problem of organizational learning which is embedded in the human processes of the organizations. Organizations learn when individuals acting as agents for the organization learn (Argyris, 1997). The learning of individuals is enabled or inhibited by systemic factors called an organizational learning system (Argyris, 1977). Learning is detection and correction of error (Argyris, 2000). Error is the difference or gap between the desired outcomes and achieved outcomes. Let's say the management of an organization decides to undertake a digital transformation. If the organization can transform itself then we can say that the organization achieved its intended goal. But if the efforts fail then there is an error. Argyris claims that errors can be corrected in two ways, single-loop learning or double-loop learning. In single-loop learning, the underlying goals and assumptions are not questioned. The ways to achieve the goals are reviewed and if necessary changed. The job gets done and goals are achieved. Organizations and most management technologies are based on single-loop learning. Double-loop learning occurs when the underlying goals, assumptions, objectives, and policies are questioned and reviewed. When the organizational actors review which assumptions, hidden systemic goals, and values led to the errors and change them then the organization double-loop learns. Literature indicates that double-loop learning is a rare event (Argyris & Schön, 1996; Dixon, 2002; Martin, 2003; Robinson, 2015). The lack of double-loop learning can be traced back to assumptions and reflexes embedded in communicative processes around difficult conversations in the organizations (Edmondson & Smith, 2006). First let's look at the paradoxes and resulting double binds in communication. Then we will provide an example of how communicative and social processes around difficult issues prevent organizational learning.

### Paradoxes and Double Binds in Human Interaction

Communication is the essence of management work (Winograd & Flores, 1987). Human communication is a complex process that depends on both content and context. Communication is not only the words uttered, which constitute the content of the communication but also context which is the tone of voice, the body language, meanings intended as well as how the communicating parties are related to each other in terms of their position in the social setting. If a manager says to a subordinate "*I don't have your report*" the subordinate uses the manager's tone of voice, body language, and the context of the conversation to make meaning of this statement (Ross & Nisbett, 2011). Depending on these factors the subordinate can perceive the statement as a reminder, a joke or a reprimand. Since a simple statement can mean many things, the ambiguity in the communication can be dealt with by seeking clarification such as asking the question

*“what do you mean?”* Such a question is called metacommunication, a communication about communication (Hoppenbrouwers & Weigand, 2000). When metacommunication is not established, further difficulties in communication arise. This lack of metacommunication can be due to lack of time, lack of communication channels, and usually the understanding of the parties. There is a communicative pattern that deeply disrupts the effective working of human systems and organizations. This pattern is called a double bind (Watzlawick, 1977, p. 18). First described by Bateson and others, (Bateson et al., 1956), double binds are encounters where a person of power gives a message that creates a situation in which the receiving party fails to act successfully no matter what. Double binds are repeatedly occurring situations that involve a figure of authority and one who is (for the purpose of definition) as “subject.” In the situation that creates the double bind the authority figure makes a statement that imposes the subject with the injunction that can be in one of the two following forms:

“do x or you will be in trouble.”

“do not do x or you will be in trouble.”

The trouble can include actual or perceived punishment, expression of anger or abandonment by the authority figure. Bateson argues that what is important is the relationship between the authority and the subject. The general characteristics of the relationship that produces the double binds can be given as:

1. The subject is involved in an intense relationship in which he has to discriminate accurately what sort of message is being communicated so that he may respond appropriately.
2. He is given a message that contains two different messages and one of these messages denies the other.
3. The subject is unable to comment on the message to clarify. That is, he cannot state the conflicting messages and ask for clarification.

This way the subject receives two conflicting messages or demands neither of which can be ignored or escaped. In such a situation no matter which demand he selects to fulfill the other demand will be impossible to meet. Although double binds are often utilized as forms of control without open coercion (Bateson, 1987) they are not necessarily so. Double binds can arise from the perception of coercion or control (Argyris, 2000). Communication that creates double binds is paradoxical (Watzlawick, 1977) that is they produce the opposite effect they intended. Watzlawick gives the example of a wife who needs affection from her husband. The wife tells her husband “I wish you would bring me flowers.” While this request is reasonable, the wife ruins her chances of getting the affection she wants because the statement puts the wife and the husband in a bind. If the husband brings the flowers she will feel dissatisfied because he didn’t do it out of affection but because she told him to do it. If he does not bring the flowers, then it signifies (to her) that he does not love her. Paradoxical communication creates double binds that lead to lose-lose dynamics. Double binds are stressful and can lead to counterproductive behavior and unintended consequences when actors are trapped in the process and punished for the ways they find out to escape the dilemma. On the other hand, attempting to find out about the nature of dilemmas and ways to resolve them can lead to personal and organizational growth (Argyris, 1982; Robinson, 2018). Now let’s look at a case in which problematic communication leads to double binds which in turn causes an organization to fail in achieving its goal.

### A Digital Transformation Case

The executive board of one of the biggest organizations in its sector in the country decides that a digital transformation is a necessity. Several consulting firms are identified to help the transformation effort. In a meeting, the board creates a team from managers as well as technical experts within the organization to prepare a report about the capabilities of the firms so the winning firm can be decided. Later in the meeting the CEO makes the following statement:

“I know we have identified several consulting firms. I suggest adding the X firm to the list. That is because I know the CEO of X and they have successfully helped transform several organizations. But this is my personal request and should not affect your decision. You should prepare the report objectively and based on the firms’ capabilities. Do you have any questions about this matter?”

No one asked any questions and the meeting was adjourned. After the meeting, the team is virtually divided into two. The first group thought that the CEO wanted the X firm to be awarded the contract because the CEO of X was his friend. One of the writers asked this group how they knew what the CEO wanted. The answer was “you heard what he said. He definitely wants us to prepare the report that shows X as the best candidate. But we should be careful because he has to cover his back. That is why the report must look objective.”

The second group thought that the CEO really meant what he said when he said “you should prepare the report objectively and based on the firms’ capabilities.” But they also thought that they shouldn’t let the X firm look too bad because of the CEO’s friend.

The managers give their subordinates their respective messages. One manager who initially believed that the CEO wants an objective report said to her subordinates: “we are going to prepare a report about vendors. I want you to make technical criteria as clear as possible since we should be as objective as possible both in our own requirements and the capabilities of the potential vendors. By the way, X firm looks like a promising candidate. We may be working with them.”

One other manager who believes that the CEO already selected X says to his subordinates: “It is already decided that X will be the vendor. But we must make sure that they can meet our requirements. Thus we must prepare an objective report about our requirements and the capabilities of other companies.” Notice how the manager’s give their own ambiguous messages to their subordinates, act as if they are not doing so and act as if this is not the case. This way, at each level of the organization, the confusion increases while people act as if they clearly know what is going on. Initially, subordinates prepare very detailed technical reports using objective technical specifications. Some of the reports show X firm as a better candidate some not. Manager’s find these reports risky because they provide a clear answer to an ambiguous demand thus may put them in an embarrassing situation. So they change the wording of reports into more vague statements that can be interpreted as both favoring X and not favoring X. The CEO finds the reports very detailed but too vague to be helpful in making a decision. None of these are discussed. The CEO thanks the team and unilaterally makes the decision to develop a solution internally. After two years and spending a few million the CEO is fired. The new CEO thinks that internal development is a pit of money, abandons it and outsources the DT transformation.

### What happened?

Now let's try to make sense of what is going on in the organization.

1. The CEO provides a message that contains ambiguous meaning and acts as if the message is not ambiguous.
2. Team members select one possible meaning and act as if this is what the CEO meant. They don't want to embarrass the CEO by raising the ambiguity in the message because doing so would in turn embarrass them.
3. The directors when become aware of the other possible meaning, hedge. That is they take action in ways that will prevent his or her embarrassment thus reducing their personal risk.
4. In order not to get embarrassed in front of the others, the manager's by-pass is perhaps the most important factor in the success of the DT: what exactly the CEO wants and act as if they are not doing so.
5. A very critical component of the DT becomes undiscussable and its undiscussability undiscussable.

The CEO provided a message Argyris calls a "mixed message." A mixed message is one that contains inconsistent, conflicting demands, ambiguous meanings but is communicated as if it is consistent (Argyris, 1994). When the receiver of a message equates the constructed message as the intended message then there is no perceived need for clarification because he considers the meaning he made as the meaning the sender intended. In our example when the manager says "I don't have your report" and the subordinate interprets this utterance as a reprimand he or she will react to the perceived reprimand. The subordinate will not need to check whether the utterance was meant as a reminder, a joke or a reprimand. This simple communicative process can lead to a communicative pattern which in turn leads to very complex and counterproductive consequences for the organizations. In our example, the CEO on the one hand asked for an objective report. On the other hand, he said things in favor of X company. In order to act effectively the director's need clarification about the CEO's actual intention or interest behind the message. What prevents organizational actors from demanding such a clarification? There are several factors. One important factor is their own understanding. Even the message is ambiguous, when the receiver selects one of the possible meanings and treats that meaning as if it is very clear leaves out the need for clarification (Martin, 2007). Another important factor is the actors' understanding of their social system. We got clues about the social system within the executive board with two examples: When we asked one of the board members what prevented him from asking the CEO for clarification he said "Are you crazy. I would look like a fool." One other board member answered the same question by saying "he would deny that he wants us to select X". Yet another member answered "I know that he has our organization's best interest in mind. But perhaps the CEO of X asked for a favor and (our CEO) wants to be in a position where he can say he tried." The social system within which the executive board lives and acts, at least in their perception, leads them to believe that when they ask for clarification they "will look like a fool." Within this social system it is a legitimate move to make attributions about others' intentions, not test these attributions and act as if they are right. Also they are acting as if they are not doing so. This way the communicative process used by the management puts them in a tough spot. If they prepare a report explicitly favoring X, they will not be acting objectively and to the best interest of the organization which good

management requires. If they prepare an objective report they can get into trouble with the CEO. Thus now they are in a double bind. In order to get out of the bind they have to metacommunicate -ask for clarification- but the social system they created and within which they operate is not conducive to such a move. Thus the managers act in ways that increase the ambiguity of the message sent from top down and act as if they are not doing so. Argyris calls these types of interactions “inhibiting loops” (1977) because they inhibit detection and correction of errors. Using thousands of cases from all over the world, Argyris and Schön (1978, 1996) found out that when people come across ambiguous, conflicting, inconsistent information they act in ways that increase the ambiguity, conflict and inconsistency. The subordinates find themselves in the same situation and act similarly thus the ambiguity multiplies at each management level. The reports prepared under such conditions become increasingly detailed, unclear, vague and thus unusable by the top management. When the CEO reads the reports he makes his own attributions about what the managers are trying to do. He thanks the managers for their hard work and dismisses the reports. The managers in turn believe that they were right that the CEO would do whatever he wanted and were asking for reports only to support his already decided position. This way the organization has a circular process in which ambiguity, vagueness, and inconsistency increase at every level from top down and subordinates’ reactions feed back to increase these factors. In such a circular process, talking about errors and their causes becomes increasingly threatening.

### Implications for Digital Transformation

Based on our understanding of circular patterns of interaction working in the organization that both lead to errors and at the same time prevent detection and correction of errors and the social skills and environment that facilitate those patterns, we can review the advice regarding DT. It is important that stakeholders should have a shared understanding and common goal. Key stakeholders should understand that digital transformation is a continuous process. Organizational actors usually understand that as the environment changes organizations also need to change. On the other hand, the communicative and social processes within the organization remain the same across changes. In our example, although the executive board as well as managers had the same goal of transforming the organization they failed to achieve this goal and are unaware of how they contributed to this failure. Recommendations regarding DT do not deal with the human processes in the organization that works against the shared meaning, common organizational goals. The counterproductive processes cannot be identified and removed easily because many times these processes are part of the organization. People are usually unaware of the fact that they trigger and drive these processes and whenever they become aware they act in ways that further proliferate the process.

**There should be a clear strategy for both DT and the organization.** Having a clear strategy does not guarantee a successful implementation. Failing to detect where the implementation failed and the inability to correct the errors undermines the strategic efforts.

**Top management should be aware of the threats to the business and they should find win-win solutions.** People, especially top management are usually aware of threats and attempt to avoid such threats. The communicative processes used to communicate the threats internally and deal with those threats undermine win-win solutions and lead to win-lose solutions. **Digital transformation requires collaboration between different functions and actors.**

**Organizational silos should be brought down because digital works across disciplines and departments.** Organizational actors collaborate for enabling transformation and unknowingly inhibit the transformation. As digital works across disciplines so do the communicative processes that inhibit effective learning. **The leader should have a clear focus on tangible performance while simultaneously exploring different approaches.** This is paradoxical advice and as seen in the example above, when managers attempt to deal with paradoxical situations, instead of making what is ambiguous clear, what is inconsistent consistent, and what is vague explicit they escalate the ambiguity, inconsistency and vagueness. **Management must create transparency, open dialogue and education. They should also be clear that some of the jobs in the organization are going to be replaced.** When dealing with difficult issues, management creates opacity, prevents dialogue around difficult issues, and educates subordinates in ways that further make open dialogue difficult. The recommendations regarding DT and its implementation does not deal with the inherent communicative and human processes that exist in the organization and works in ways that undermine organizational effectiveness. These processes are rarely surfaced and dealt with. The literature about organizations provides very little examples about how to effectively deal with such processes. More research is required to better understand the dynamics of these processes not only in organizations that achieved effective transformation but also in those that failed to do so.

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### To Cite This Chapter

Derindere, M.S. & Gulsecen, S. (2022). Paradoxical Communication that Prevents Digital Transformation, M.H. Calp. & R. Butuner (Eds.), *Current Studies in Digital Transformation and Productivity* (pp. 138–146). ISRES Publishing.