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How to lead complex situations

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How to lead complex situations

The military leader is experiencing increasingly more complex situations, whether it is as leader in a foreign combat environment or in the home-based public administration. Complex situations like these call for a special set of managerial responses and a special way of leading organisations. The proposition of this article is that the methods that drive innovative processes, strengthening the creative culture, are necessary to manage complex situations in military contexts.

By Michael Pingel Hansen

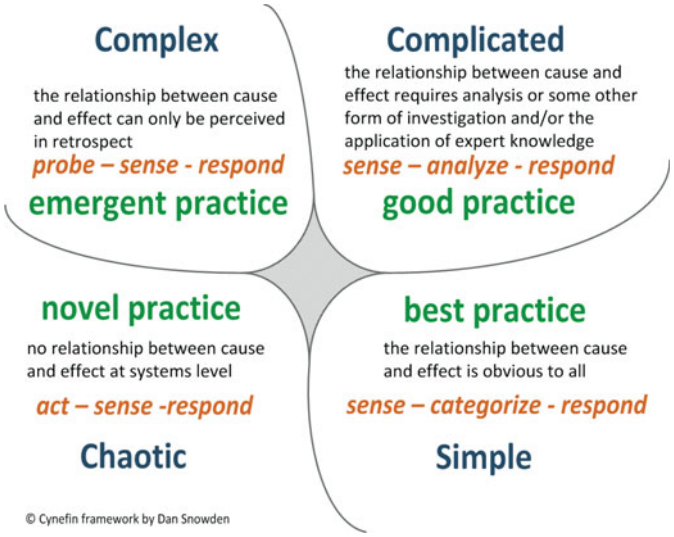
When Western allies stand before burning down poppy fields in Afghanistan, they face a complex problem. On the one hand, the production of poppies helps to finance the Taliban and supplies most of the world's market of heroin. On the other hand, a vast number of Afghan farmers' livelihood depends on growing poppies. And if the livelihood of afghan farmers disappears, the subsequent desperation could push them into the hands of the Taliban.

The military leader is experiencing increasingly more complex situations, whether it is as leader in a foreign combat environment or in the home-based public administration. In the combat environment the interaction between numerous power domains, military and non-military players, social, cultural, ethical factors etc. increases the complexity (Møller, 2013). In the public administration the complexity arises from multilayered cross pressures and paradoxes, which both leaders and employees in the public administration face (Majgaard, 2008). Increasing expectations for the diversity, flexibility and quality of the services provided by the military together with the increasing political intervention and a demand for greater efficiency and budget cuts set the stage for one of the most present and persistent cross pressures.

So how can leaders cope with these complex problems? The solution should be found in the field of innovation, and it is about alternating between complex problems and other kinds of problems and about using a combination of convergent and divergent methods of problem solving.

The Cynefin framework

To solve a complex problem we have to know how the role of leadership in complex situations differs from that of other situations. The Cynefin framework by Snowden and Boone enables us to distinguish between four contexts: simple, complicated, complex or chaotic (Snowden & Boone, 2007).



In the *simple context* there is an obvious relationship between cause and effect. The best strategy for a military leader to handle problems in a simple context is to identify a best practice and then use it to solve all similar problems.

In a *complicated context* there is still a relationship between cause and effect, but in order to identify that relationship the military leader needs to do extensive analysis or use the knowledge of an expert. Often there are several ways to solve the problem based on different kinds of analytical methods or expertise. Therefore, there will not be one best practice, but several good practices. So the strategy of the military leader should be to identify several good practices and offer them as possible solutions to similar problems.

In a *chaotic context* there is no relationship between cause and effect. The best strategy for a military leader to handle problems in a chaotic context is to act fast to try to stabilise the situation, and hopefully the situation will change to a more complex nature.

In a *complex context* there is no linear relationship between cause and effect, but a pattern may emerge over time and offer some kind of order, even though it often exists for a limited time only.

So let us look more closely at the complex context. Snowden and Boone define the complex situation according to the following characteristics:

- ‘It involves large numbers of interacting elements
- The interactions are nonlinear, and minor changes can produce disproportionately major consequences
- The system is dynamic, the whole is greater than the sum of its parts, and solutions can’t be imposed; rather they arise from the circumstances.
- The system has a history, and the past is integrated with the present; the elements evolve with one another and with the environment
- Though a complex system may, in retrospect, appear to be ordered and predictable, hindsight does not lead to foresight because the external conditions and systems constantly change’.
  Source: Snowden & Boone, 2007

That is, even though patterns may emerge, in a complex domain we can only understand what is happening in retrospect. The leader should therefore allow for experiments to unfold and wait for patterns to emerge. In other words, the military leader first needs to probe, then sense and, finally, respond.

When leaders find themselves in complex situations they often turn to experts and start to make comprehensive analyses to solve the problem, but they thus try to solve a complex problem as if it is complicated. Either they find it impossible to get a grip on the problem or the solutions seem to fall short of fixing the problem. 'Leaders who try to impose order in a complex context will fail, but those who set the stage, step back a bit, allow patterns to emerge, and determine which ones are desirable will succeed' (Snowden & Boone, 2007).

Innovative ways out of complex problems

But how can military leaders set the stage and probe instead of using traditional means like analysis when they find themselves in complex situations and are unable to impose order? One useful strategy is to draw on a lot of people with different understandings and knowledge of the complex problem and hope that someone will come up with a good solution to the problem. This strategy is a good starting point, but handling a complex problem should not be left to chance alone. The tools of creativity and innovation can be helpful here to work with complex problems in a structured and guided manner.

There are many variables in a complex situation, and the interaction between these variables is nonlinear and interdependent. Therefore, the process of acting in a complex situation cannot be rational and linear. To solve complicated problems we cannot rely only on convergent analysis and on using our own knowledge in a traditional manner. Instead we have to use divergent thinking and adopt an experimental approach to the situation to solve complex problems in a more creative way.

Most military leaders are fairly good at convergent thinking and have been trained to do complicated analyses fast. And to do complicated analysis fast one has to be able to do convergent thinking and narrow down the number of variables that must be taken into account. But doing this in a complex situation will leave you with a very limited view of the situation, which cannot generate the required number of ideas for solutions to the problem at hand. Instead military leaders need to be able to facilitate divergent processes in order to get their organisations to produce innovative ideas. These innovative ideas should not only be new solutions, but also include entirely new ways of viewing the problem.

Divergent and convergent thinking

In their research de Ven et al. have found that in order to be successful in creating innovative solutions one has to be able to shift between divergent and convergent processes (de Ven et al., 1999).

Convergent thinking is a goal-oriented way of thinking based on logic, analysis and structure. 'In convergent thinking, there is usually one conclusion or answer that is regarded as unique, and thinking is channeled or controlled in the direction of that answer' (Guilford, 1956).

Divergent thinking is an exploratory way of thinking, where the goal itself becomes the object of exploring. It views the problem or task at hand from numerous perspectives and without critically evaluating the ideas that may emerge. 'In divergent thinking there is much searching or going off in various directions. This is most clearly seen when there is no unique conclusion' (Guilford, 1956). But without structure and guidance a divergent process can easily go off in various directions without eventually arriving at any useful results. Therefore, military leaders should be trained in facilitating creative and innovative processes, using methods like brainstorming or the perspectives of different roles, to enhance the likelihood of success.

By using tools to facilitate divergent thinking military leaders can enhance their own and their organisation's capabilities to creatively manage complex situations. Both divergent and convergent thinking are important in solving complex problems, but should be separated in the process. If they are not separated, it is most likely that convergent thinking will suppress divergent thinking with critique and analysis and not give room for creative and innovative thinking. Therefore, the military leader should be able to facilitate a process where divergent and convergent thinking are separated and used independently to produce useful solutions to complex problems.

Five principles for generating creative ideas:

1. **Produce as many ideas as possible**
   Quantity over quality. More ideas will increase the chance that some of the ideas are useful or can inspire others to come up with useful ideas.
2. **Produce crazy ideas**
   No ideas are too crazy. Crazy or seemingly unusable ideas will often inspire others to produce more useful ideas.
3. **Avoid criticism**
   Maintain an enthusiastic and uncritical atmosphere. Avoid judging or evaluating the ideas. Wait until the creative process is over.
4. **Expand ideas**
   Build on the ideas of others. Expand and combine ideas into new ideas. Try to encourage people to use the ideas of others.
5. **Allow spontaneity**
   Allow spontaneity to influence the creative process. View ideas or attempts to change the process as opportunities rather than obstacles to the planned process.

Further reading

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