



THE MYTH OF THE PDCA-CYCLE IN TIMES OF EMERGENT CHANGE

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THE PDCA-CYCLE MIGHT NOT BE APPLICABLE to situations where change is unplanned or emergent. In situations of planned change the Deming cycle is used worldwide and proven to be very effective. However in an emergent change process the PDCA might not be the applicable. These emergent changes increase. In those cases, like Lao Tzu said: 'A good traveller has no fixed plans, and is not intent on arriving'.

Studying cultures that have another view on planning might help to find a new approach that fits in times of emergent change. Experiences in Africa lead to a new model for change called ACCRA (c). It also has reflection-in-action as its core. But it requires attention to people, considering the context and showing commitment as well along the whole process. This article describes the design and first experiences with a new approach for improvement in emergent change processes.

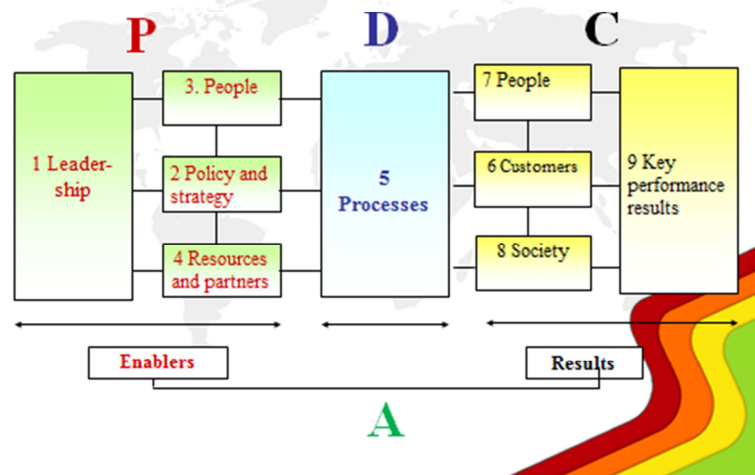
Introduction: The PDCA-cycle

For many quality experts the PDCA-cycle is the core of their profession. Shewhart has been the inventor, using three steps already in 1939: specification, production and inspection. However, the PDCA-cycle has ever been strongly connected to Dr. W. Edwards Deming. Deming is supposed to have mentioned it first in a lecture in Japan in 1950. In that version it consists of four steps: plan, do, check, act.

The model kept being used and modified. Dr. Deming himself introduced a PDSA cycle in 1993, replacing check by study. Those in favour of stabilization use a SDCA (standardize-do-check-action) cycle. In Six Sigma programs, the PDCA cycle is called "define, measure, analyze, improve, control" (DMAIC). In the world of design a model called Explore, Do, Check, Act (EDCA) is used. In his article *The death of PDCA* Joe Dager comes to a list of 25 variants.

The principle as such has however been most widely known as the PDCA-cycle. This PDCA is said to be the core of any quality management system. It can be recognised in the Malcolm Baldrige Award, the EFQM model, in ISO. A fundamental principle of the scientific method and PDCA is iteration. Repeating the PDCA cycle can bring us closer to the goal, quality improvement, it is said.

Furthermore it is stated that the PDCA-cycle can be applied to the improvement of processes, products, and services in any organization, as well as improving aspects of team work and of one's personal endeavours. It can be used for breakthrough (jumps) as well as small steps (Kaizen). Everywhere in the world. It seems like a panacea. We here talk about the PDCA as instrument for organisational development like in the Business Excellence Models.



Problems with the PDCA cycle

However, there is at least one problem with the PDCA-cycle. It is difficult to apply in situations of emergent change. From a change perspective continuous improvement can be grouped into two categories: planned change and emergent change. Emergent change can be defined as actions, adaptations, and alterations that produce fundamental change without an a priori intention to do so. Lifvergren et al. (2011) make a comparison between the two (see table 1).

Planned change	Emergent change
Almost always accompanied by unexpected consequences	The outcome is not the preconceived solution, but the development of the most appropriate solution for the stakeholders concerned
Appropriate for structural changes	Appropriate for cultural changes
Appropriate for economic-based change	Appropriate for organizational capacity
Appropriate for new organizational structures	Appropriate for change process targeting work processes

Table 1: Planned change versus emergent change, based on Lifvergren et al. (2011)



As Stacey (1996) makes clear, the occurrence of sensitive dependence on initial conditions is no exception in social and planning processes. As a result there is an innate difficulty to actually control these processes and to know their outcomes. Uncertainty and instability are therefore up to a certain level inescapable (Zuidema en De Roo, 2004). Emergent change requires that we are willing to give up even more of our certainties. This is not about preventing the chaos to occur by making the right choices and by working towards their achievement. It is about perceiving the uncertainties and the chaos and seek for “synergy” mostly with other organisations and people (Zuyderhoudt et al., 2002).

PDCA might work in the situation of planned change. But does it work in the case of ‘unplanned’ change? Lifvergren et al. (2011) state that from a complexity point of view, change emerges and is most often beyond the realms of detailed planning. Mintzberg (1994) talks about “the fallacy of prediction and formalization“. Sometimes strategies must be left as broad visions, not precisely articulated, to adapt to a changing environment”, he said and that kills the conviction that organisation should not only have goals, but SMART goals. Ordóñez et al. (2009) reviewed a number of research studies related to goals and concluded that the upside of goal setting has been exaggerated and the downside, the "systematic harm caused by goal setting," has been disregarded. They identified clear side effects associated with goal setting, including "a narrow focus that neglects non-goal areas, a rise in unethical behaviour, distorted risk preferences, corrosion of organizational culture, and reduced intrinsic motivation." Especially making our goals smart is one of the reasons goals can backfire. A specific, measurable, acceptable, relevant and time-bound goal drives behaviour that's narrowly focused and often leads to either cheating or myopia. Yes, we might reach the goal, but at what cost? Schweitzer et al. (2004) support that: "[...] people with unmet goals were more likely to engage in unethical behaviour than people attempting to do their best. This relationship held for goals both with and without economic incentives. We also found that the relationship between goal setting and unethical behaviour was particularly strong when people fell just short of reaching their goals." The world is too uncertain to be able to plan en do exactly as you planned.

It gets even worse when the PDCA-cycle is presented with a wedge. In images like that we see a man sweating to push the PDCA-cycle to the top of the hill of continuous improvement. A wedge is put under the cycle “to prevent it from falling down the hill” (see figure 1). Here the Dutch word *kwaliteitsborging* is mentioned in the wedge. It can best be translated by quality assurance. But “borging” is a stronger word, it originally refers to *secure a bolt with an nut*. To make sure the bolt cannot move anymore at all. Thinking in terms of the wedge makes you look back: why hasn’t been done what we have agreed upon? Where continuous improvement asks for looking ahead, continuously looking for opportunities to do it better.

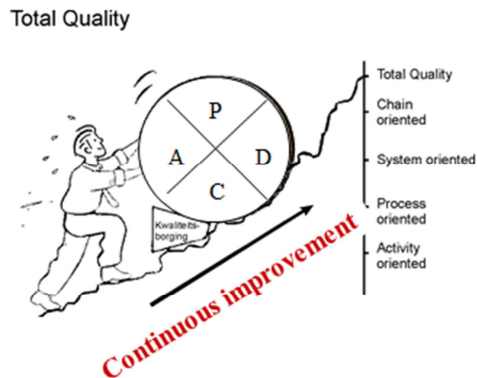


Figure 1: The wedge and the PDCA

In general the PDCA cycle forgets, we have to deal with people. It is a rational, hard, male instrument, especially as it is mostly used. Emotional, soft, female issues are not taken into account enough.

Other cultures

Trompenaars and Hampden-Turner (2012) discern between sequential planning cultures and synchronic planning cultures. In sequentially organized cultures present and future are causally linked. Deadlines are important because they signal the end of one link in a causal chain and the beginning of the next and keep you “on schedule”. But, “There is accumulating evidence that sequential planning processes work less well in turbulent environments”. In synchronic cultures plans are less important than flexibility. They have another sense of time, another understanding of past, present and future.

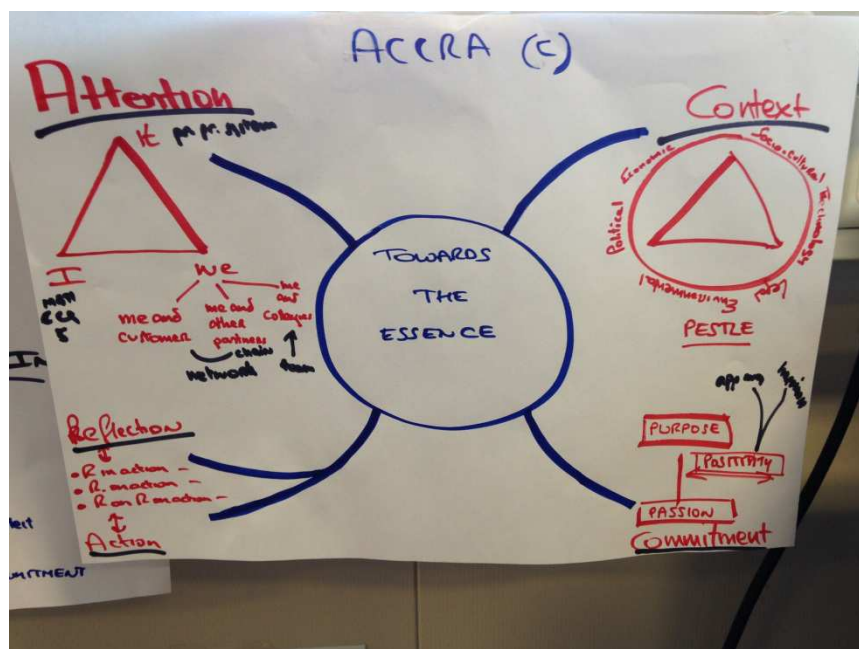
In a Quality Management training in Ghana for managers of a hospital one hour after the time agreed upon, no manager was there to attend the course. The trainer wondered if he was at the right place at the right time. He was. After one and an half hour participants started to come in, one by one. A medical doctor was late because a patient needed care. A managing doctor arrived late, because one of his employees got into trouble and needed his help. Another one had domestic problems to take care off. If all this was true, what does it say to us Westerners? Maybe it is not always possible to plan. Maybe we shouldn't even try, since other priorities might occur. But what then is the alternative? What can we learn from synchronic planning cultures that we can use in the emergent change processes we are in? In the same hospital strategic planning appeared to be a long-lasting activity. It took a year to develop, discuss and decide on the organisational strategic plan.

But even within a culture it is questionable if the same approach works in every organisation, in every situation, at all times. There is no one method for organisational development, just as the contingency approach states (Woodward, 1958) .

ACCRA (c)

Experiences with quality management consultancy and training in hospitals and universities in several emergent countries lead to five principles to take care of in unplanned change processes: Attention, Context, Commitment, Reflection and Action (ACCRA ©). Unlike the PDCA-cycle these are not sequential steps. All need to be taken into account during the whole change process. Here the perspective is taken of leadership in change.

Change leaders need to connect to people and give them real attention. Leaders need to consider the different and changing context. They need to focus on getting commitment to the cause. And of course they need to continuously reflect during the action.



Attention

Cultures give a different meaning to business partnerships. Having a business meeting does not necessary means everywhere, that you start talking business. Many non-western cultures take their time to meet each other, to talk, to getting to know each other and drink some coffee or tea, every time you meet. Relationships are more important than plans and goals. Leadership in emergent change processes requires giving attention to the human being continuously. That is an universal need. Giving attention appeals to where a person's passion is, opens the hearts for change. And it means trying to make rapport with someone as a starting point of a sustainable relationship.



Context

Quality and quality improvement differ from one place to another from one moment to another and that is crucial. Knowing the context is crucial to understand what steps are needed to lead the change. Experiences in emergent countries prove how important it is to understand the context in which the change should be accomplished. Applied to organisations this means you have to take into account the contingencies (Woodward, 1958). Studying the context of an organisation and take that into account is a condition sine qua non for the ability to change. Sticking to procedures is not the solution in times like this with moving targets and changing milestones. We need to monitor the context continuously to know which wind to follow.

Commitment

In Asian countries in transition like VietNam business is booming. It is striking to see that many people in a country like that have a purpose in life and are really committed to make the dream come true. They continuously walk the extra mile. Such a commitment drives the change.

To support commitment of others leaders in change should show commitment themselves. It requires presence and knowing your own passion. You have to be the example, you have to, like Mahatama Ghandi said, "be the change you want to see in the world". That requires a positive mindset rather than the problem solving mind of PDCA¹.

Reflection in Action

Asian cultures have a dream rather than smart goals and are flexible in the way to get there. In emergent change just as in planned change processes we need to look back on what went well (appreciative inquiry) and what went wrong (hansei). Leaders need to facilitate that continuous reflection, but fast. It is the 'reflection-in-action' Schön (1987) is talking about: improving during the action itself. It is single loop learning (Senge, 2006). It is the university professor who decides to reinstall moments of evaluation during his lecture, a good habit that often was abandoned at the moment the centrally organized paper evaluations came in. This is what is left of the PDCA: an iterative and fast RA-RA-RA.

Conclusion

Our review of the applicability of the PDCA-cycle in times of unplanned change brings us to ACCRA (c): Attention, Context, Commitment, Reflection and Action. ACCRA © is a set of concentric circles rather than a cycle. Unlike in the PDCA-cycle you have to take care of all elements at the same time. Change leaders have to pay attention, get rapport with the human beings continuously. They have to adjust to the context the people are in, the organization is in. They have to be committed from beginning to the end. And they have to reflect in and on action continuously.

¹ As proclaimed by Positive Psychology, Appreciative Inquiry, Happiness at Work and such.



References

- Kemenade, E.A. van (2010), Past is prologue. Know the history of quality management to achieve future success, *Quality Progress*, August 2010.
- Lifvergen, S., Docherty, P. and Shain A.B.R. (2011), Toward a Sustainable Healthcare System: Transformation Through Participation in: Mohrman, S.A., Shani, A.B.R. and Worley, C., *Organizing for Sustainable Effectiveness* (2011), Emerald Books, UK.
- Mintzberg, H. The Fall and Rise of Strategic Planning, (1994) *Harvard Business Review*, pp. 107-114
- Ordóñez, L.D., Schweitzer, M.E., Galinski, A.D. and Bazerman, M.H., (2009) Goals Gone Wild: The Systematic Side Effects of Over-Prescribing Goal Setting, *Harvard Business School NOM Unit Working Paper No. 09-083*
- Schön, D. A. (1987), Teaching artistry through reflection-in-action. In *Educating the reflective practitioner* (pp. 22-40). San Francisco, CA: Jossey-Bass Publishers.
- Schweitzer, M. E.; Ordóñez, L.; Douma, B. (2004), Goal setting as a motivator of unethical behavior", *Academy of Management Journal (Academy of Management)* **47** (3): 422–432, doi:10.2307/20159591, ISSN1948-0989, <http://amj.aom.org/content/47/3/422.abstract>, retrieved 2013-01-23
- Senge, P. (2006) *The Fifth Discipline, The art and practice of the learning organisation*, Random House
- Stacey, R. (1996) *Strategic Management and Organizational Dynamics*. 2nd Ed, London, Pitman.
- Trompenaars, F. & Hampden-Turner, C. (2012), *Riding the waves of culture*, Nicholas Brealey Publishing
- Woodward, J., (1958), *Management and Technology*, Her Majesty's Stationary Office, London
- Zuidema, C. & De Roo, G. (2004), *Integrating complexity theory into planning: truth or dare*, Urban and Regional Studies Institute (URSI) University of Groningen.

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