Standardisation
and Taking initiatives

Ton Voogt
August 2014

Summary.

A breeder of new fruit regular consult farmers on-site, but after three months he observes no progress.

Observations of the production in a small-fruit farm in Indonesia are analyzed to surface the underlying organizational processes. Many actions in the farm are standardized and split up in specific tasks to enhance effectiveness and efficiency. This standardization and split up, is resistant to change when change in conditions ask for it. For instance: changes in weather, flora illnesses, changes in compost, changes in practice itself. In practice is a standardized procedure is often changed based on one signal without taking into account other optional consequents.

Based on this analysis I give several suggestions for improvement without changing the organization of the production.
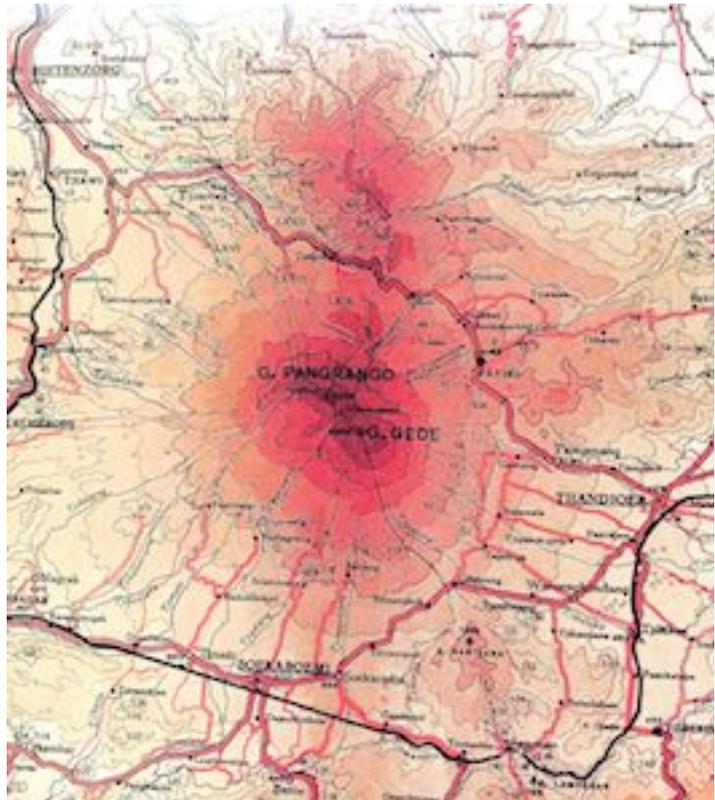
Westerbouwing, breeding station in The Netherlands
www.Advancedberrybreeding.nl

Geert, the founder and breeder, invites me. „Come and have a look in Indonesia". Geert improves small fruit: strawberries, blackberries and especially raspberries. Superstores favor fruit that stay fresh for a long time, have an attractive color, taste and bite. His new breed ‚Kwanza' is favored by fruit farmers too. More pickings of a branch, good taste and color. Easy to harvest, twice a year. Geert provide farmers with slips, knowledge and procedures. In return they pay a license-fee, pay for the slips and the regular consults on the spot. Farmers in Mexico, Spain, Portugal, Germany, England,

The Netherlands, Tanzania, Southern Korea and Indonesia grow Kwanza fruit. This spread of farms opens the opportunity to supply the world-market year round with raspberries. The demand for raspberries rises with the rise of living standards.

The breeding station in the Netherlands is the lab. Cross fertilizing, changing food conditions, consequents of procedures in planting, growing, harvesting, cooling. When a new breed is ready for massive production a complete handbook is available.

A problem?

The aligned farmers consult Geert three, four time a year. At the farm Geert walks with management and all local employees through all parts of the production site. He observes, comments, asks, give answers, explains, instructs, demonstrates. At home, in his breeding station, he writes suggestions and procedures and send these to the local management. Step by step every farm collects a complete handbook with all procedures. Every vist new supplements. Geert passes experiences from one site to another.

„ After three, four month I visit again and then it looks like I haven't been there at all. All I demonstrated is not in their habits. I have to start all over again. All I learned them is gone. I even wrote all down, but no implementation. They act as if they understand all by themselves. They take initiatives, one does this, another says that. They act as if all are experts. But they are short sighted. Often their changes have many not wanted consequents. In Spain, Tanzania, Indonesia, South Korea".
We visit Indonesia

Observe, listen, observe, think, observe

At sunrise we ride on a motorcycle one kilometer up to the mountain Gede. The farm has leveled fields. We walk top-down. One glass house after another. The owner, his son, who studies at an agriculture college, the specialist, responsible for the quality, who got special training of Geert and the manager responsible for the specific glasshouse we visit.

An example of a conversation.

„These plants are not good: small, brown, no flowers, no fruit. How is that possible? Did you supply us with low quality slips?"

„The slips are good, the same as you got last year. They performed perfect. How much water reaches the end of the water pipe? The soil is too wet, the plants are constant in water".

„We have a schedule, but changed it and give more water because several weeks ago some plants were dry". „How much water do they need?" „How much water must come out of the pipe as not used?"

„We do not know. Not important, we do according to the schedule".

„Then you do not know what is really happening. Every evening the boss of the glasshouse must measure the drain that flows out of the end op the pipeline. Then you know if the plants had enough or not". „Who can do?". „The specialist?". „No, the boss of this glasshouse does it himself, so he knows what is going on in his glasshouse". „Where is the specialist? He should be here with us".

„But that can't be the reason why so many plants die!" „The plants have A. We got infected plants!"

„No, you got the plants clean, without any infection. Let us first have a closer look. Normally A. enters the plant by the root, but see, the root is clean. Look, the infection start where the plant has a wound here where a leaf is broken from the plant. The plant is too deep in the wet soil and is infected by this wound. The procedure of the cutting of the lower leafs must be changed. Cut these with a knife, then there will be no wounds. The plants are also to deep in the soil, the top of the root has to be dry".

„But when we give less water, the plants get less disinfectants".
„Why is that?"

„We put the disinfectants in the water, that is more easy and cheaper".

„You should not do. I told you. Disinfect only from the outside. Immediately after planting and again several weeks later. And always on backside of the leaves".

What is going on?

A lot at the same time. The production is regulated by protocols. People work and think in protocols. All actions are in Protocols. The man who invented all and build this prototype knows the interdependences of all variables involved in the production. His knowledge is handed over to the local specialist, but that one does not know how to connect with others. The ‚thinking competence' is disconnected of the production.

In a scheme:

	Research and Development	Production
Task	Design complete proces. From input to output.	Highly protocoled actions. Isolated. Exact repetition demanded.
Management focus	Develop a produceable prototype with all information and scrips needed.	Exact execution of the protocol.Coordinating between separated processes.
Mindset	What is happening? What conditions influence this result?	Act according to the protocol. Is there a better general rule?
Management actions	Create coherence between all separated actions and effects. Measure, explain, demonstrate, test.	Control on handling according to the protocol.
After an unexpected event	'Let us investigate what is happening en what causes these effects'.	Direct action and change in protocol.

A deep dive

To understand more of the thinking and interactive processes involved I take a deep dive in the knowledge about Organisations I am familiar with.

Thinking Loops

I recognise the thinking loops Chris Argyris (1) described. „The single thinking loop". This is the loop: „Dry plants? Give more water!" Second is the „double thinking loop". That is like: „Dry plants! What can cause this? The
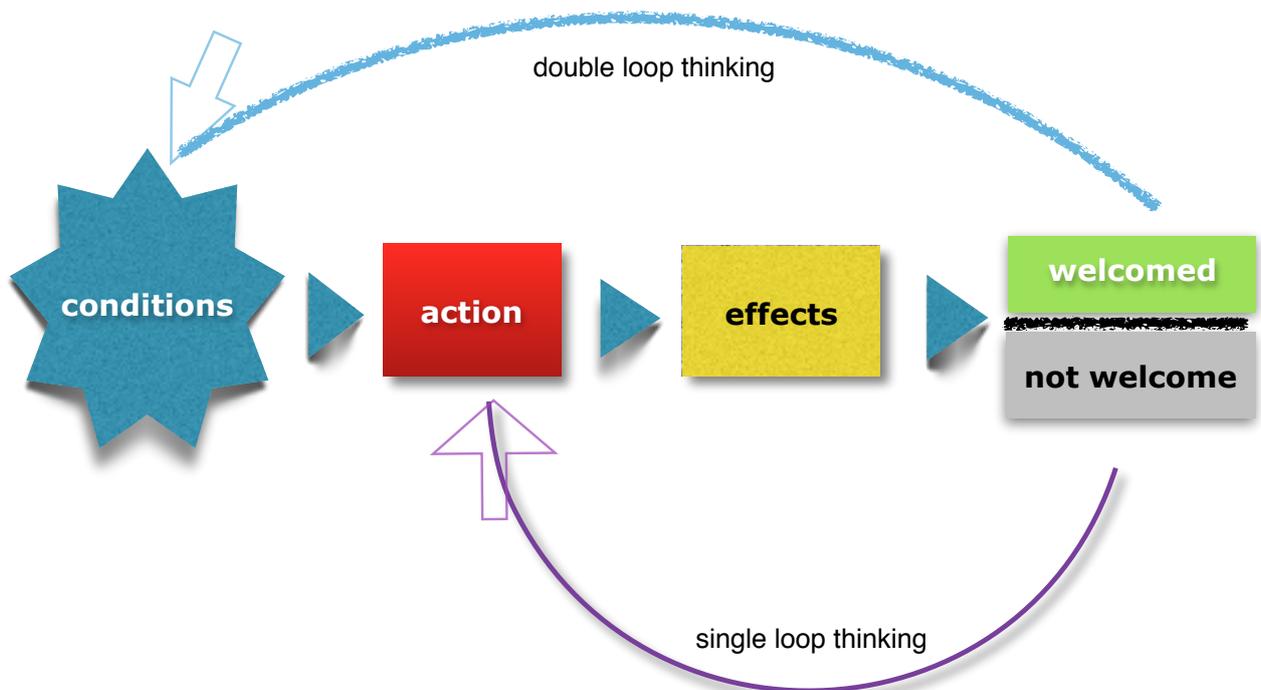
pipe is blocked? Not enough water supply? A hole in the pipe? Different plants with different needs?" Search, experimenting and measuring the effects are the follow-up actions. Production is always under stress to get the targeted results, this can block the double loop thinking.

Span of responsibility

Humans take responsibility for their work, that is normal. But when they do not have any influence on the way the work has to be done with a too narrow focus on a simple activity then they disconnect from this natural attitude. L. de Sitter (2) studies this effect and *suggest to bring more responsibility in the regulation of the work to the people who do the real hand work*. Within limits and learn them to think in systems: one action can have many causes and many consequents.

Analytic thinking and holistic thinking

T. Talheim (3) discovers that ‚*analytic thinking*’, as a preferred way of thinking for the industrial production, is more practiced by people who farm in areas with dominantly diverse corn-production. People who live in an areas dominated by wet rice farming use more the ‚*holistic way of thinking’*. The farmers in wet-rice farming depend more on each other more then in the individualised corn production. The dominance of analytic thinking training at universities prepares students to think in pre-designed paths so they fit well in the industrial production. But they lack the innovative thinking skills that rise more out of holistic ways of thinking, like, seeing combinations, seeing new unities. Analytic thinking is used in designing mass production and describing separated tasks. For adaptation to changes (and that is normal too) holistic thinking is needed. Holistic thinking has to be added as an overlay over the fragmented production. How to do?

Become an expert

Klein and Kahneman (6) studies ‚*how someone becomes an expert’*. One becomes an expert by (x) mastering more and more different patterns of behavior. Protocols of: ‚when this …. then do that…., When ……, then do……’ ,(y) ability to recognize different and complex patterns of cues in presented realities, (z) combine a pattern of cues with a specific respons pattern, (a) imagine the consequents when appying that behavior pattern, before making a decision. When the pattern has unacceptable consequents, the expert looks for another cue pattern and searches for another response pattern.

An expert can combine parts of cues patterns into new configurations and combine parts of response patterns into new response patterns. An

expert can think on what might happen if wo do….' before acting! He evaluates consequents of actions before acting.

Learning in teams

Learning is individual? Yes, the carrier of learning is the individual, but the individual in production works always in connection with others, in teams. Learning can best be a team activity. These are the basic lessons of Edgar Schein (8) and Peter Senge (9). They define Leadership as guiding learning in teams. Acquiring knowledge, application of protocols, measuring results, thinking on adaptation to changes, can best be done in teams.

Mutual Adjustment

Mintzberg (10) studied the coordination mechanism that make an organization effective and efficient. First of all: direct supervision. Then standardization of input, working processes and output. The fifth is 'mutual adjustment'. He states that even the most complex organization that is based on many strict protocols, checks and checks on qualities, only can function smoothly when there is mutual adjustment. Everyone connects direct with everyone in the organization. Hierarchy, power distance, creating power by not sharing information or fear for bringing bad messages, all are blockades for this overall mechanism of coordination that makes an organization more effective then others because they adjust faster.

Reward initiatives in questioning, in measuring, in bringing the bad news, in opposing, in arguing, in thinking aloud, sharing ideas, giving credits. all these actions promote mutual adjustment and cooperation. (11).

It looks like all pieces for an effective and efficient organization are available. How to make them cooperate? Who has to do what?

To a solution: make teams smart

Claude M. Steele (5) quotes Philip Uri Treisman who is a professor in mathematics at the University of California (Berkeley). Although all students who enter university have, in average, a same level of performance, students who practice on campus their Asian ways of living get better results then ,white' students and Afro-Americans. He observes the ways they life outside classrooms and concludes to two major differences. The white and Afro-American students study on their own, many hours in their private studies. The Asian students stay together and go over what has to be learned. They correct each others wrong ideas and share answers to difficult questions.

They fill in each others knowledge gaps. As members of the groups they all get individually better.

What more blocks the white and AfroAmerican students in their learning is that they live their lives in isolation. Questions on study are not a topic discussed with friends and with parents. In the Asian way of living these barriers do not exist. All topics can be a topic in every group.

Succes, Leadership and culture

Under the guidance of prof. House (7) tens of scientists study, in a now for thirty year running project, the relations between the succes of groups, organizations, societies, cultural characteristics and leadership.

I like to see that the work of the Dutch scientists Hofstede, Trompenaars and Mastenbroek inspired the choice for cultural characteristics as power distance, uncertainty avoidance and future orientation. In this diagram are the positive relations. The leadership styles: value oriented, team orientated, participative in combination with the cultural characteristics: strong future orientation, high performance orientation, connecting individual goals with societal goals, small power distances and a low tendency to avoid uncertainty are connected with organizational, societal succes.

Leadership	Culture of the organisation	Succes of the organisation
value oriented	strong future orientation	high economie prosperity
team orientation	high performance orientation	top in science and technology
participative	connect personal goals with goals in society	high standards of living
	small power distances	
	low tendency to avoid uncertainty	

How does the South-Asian group of cultures perform on these dimensions? Indonesia is in this group.

On leadership styles.

South Asian cultures highly value the *value oriented (charismatic) leadership* and the *team oriented leadership,* even more then the Nordic European countries who favor more plain action styles. But the *self protective leadership style,* which is negatively related to succes of an organization, is highly valued and practiced in South Asia. Characteristics of this style are: self-centered, status conscious, conflict inducing, face saver, procedural.

The participation leadership style is most favored in European and AngloSaxon countries and favors a culture that is highly related to economic succes.

Cultural dimensions

For managers it is more important to recognize the attitude of a specific individual then to focus on group scores. Group thinking blocks assessing the attitude of a specific individual.

Lists that help to recognize different attitudes:

Future Orientation

Strong future orientation relates to progress and success. The time span can differ. Companies that have a listing at the stock exchange focus on the quarterly results. Family owned companies often have a ten year perspective on return of investment. Individuals have their preferences too: one can focus on a better future for one's children or a better live standard for oneself in three years.

people with high future orientation tend to……	people with a low future orientation tend to….
have a tendency to save for the future	have a tendency to spend now
are intrinsically motivated	are less intrinsically motivated
have a long strategic perspective	have a shorter strategic orientation
view materialistic succes and spiritual fulfillment as an integrated whole	see materialistic success and spiritual fulfillment as dualities
be adaptive and flexible managers	be maladaptive and inflexible managers
value the deferment of gratification, placing a higher priority on long-term success	value instant gratification and higher priority on immediate rewards
emphasize visionary leadership that is able of see patterns in chaos and uncertainty	emphasize leadership that focuses on repetition of routines

Performance Orientation

A high performance orientation leads to a culture connected with higher societal and organizational success. But a very high pure performance orientation limits quality of life. A list of attitudes for higher and lower performance orientation

people with a higher score on performance orientation tend to……..	people with a lower score on performance orientation tend to……..
value training and development	value societal and family relationships
emphasize results more than people	emphasize loyalty and belongingness
reward performance	have high respect for quality of life
value assertiveness, competitiveness and materialism	emphasize seniority and experience
expect demanding targets	value harmony with the environment rather than control over the environment
believe they can control	emphasize integrity, loyalty and cooperative spririt
view feedback as necessary for improvement	view feedback and appraisal as judgmental and discomforting
value bonuses and financial rewards	regarde being motivated by money as inappropriate
believe that anyone can succeed if he tries hard enough	value ‚attending the right school' as an important succes criterion
value what you do more then who you are	value 'who you are' more then 'what you do'
have a sense of urgency	have a low sense of urgency
value being direct, explicit and to the point in communication	value ambiguity and subtlety in language and communication

Individualistic and collective

A more individualistic or a more collective attitude has a big impact on one's behavior.
Some characteristics. See these as ends of a continuum.

people with a high score on collectivism tend to…….	people with a high score on individualism tend to………
integrate in strong cohesive groups	look after themselves os their direct families
see the self as interdependent with others	see the self as autonomous and independent of groups
take precedence of group goals over individual goals	take precedence of individual goals over group goals
see duties and obligations as important determinants of social behavior	see attitudes and personal needs as important determinants of behavior
emphasize relatedness with groups	emphasize rationality
have a lower subjective well-being	have a higher subjective well-being
communicate indirectly	communicate directly
engage in group activities	engage in activities alone
have few social interactions that are intimate and have a long timespan	have many social interactions, short and limited in intimacy
make great distinction between in-group and out-groups	make less distinctions between in-groups and out-groups

A strong in-group orientation of a leader closes a group from open information and transparency. Management has to force openness.

Power distance

High power distance is negatively related to organizational success. Here a list to check your own organization.

organisation with high power distance…….	organisation with lower power distance ……..
differentiate in groups with high and low power	show more mobility between power positions. Most people are in the middle
see the base for power fixed and limited (ownership, family relations)	see power as transient and sharable (by skills and knowledge)
see power as the force that provide social order, relational harmony and role stability	see power as a source of corruption, coercion and dominance
have limited upward social mobility	have high upward mobility
localize information in the power centers	share information
limit access to resources, skills, capabilities so the development of the people is low	open access to recourses, skills, abilities for all. High development of the people.

Avoidance of Uncertainty

Avoidance of uncertainty, or a low tolerance for ambiguity as it is sometimes labelled, is not bad as such. It is prudent not to take too much risk. But a general attitude of avoidance or a low tolerance for ambiguity can lead to frozen organizations and individuals who are not capable to adapt from the inside to changing demands from the environment

Some characteristics of high and low avoidance of uncertainty.

Organisation with a high avoidance of uncertainty tend to…………	Organisation of a low tendency to avoid uncertainty tend to…………
formalise all interactions with others	keep interactions informal with limited formalizing
document agreements in legal contracts	rely more on each others word and the trust that in reasonable talks misunderstandings or disagreements can be solved
be orderly, with meticulous records recording all conclusions	focus on documenting only what is really important
rely on formalised politics, procedures, rules, verifications and write all communication in notes	rely more on direct communications and interactions
calculate risks in detail and make many scenarios up front for ‚in case'	think in options and act according to the needs of a situation
inhibit new developments and control implementation of new procedures or products with thight control	facilitate new developments, knowing that some will fail
value present procedures and portfolio as better then new ideas	be open to new options and different procedures
emphasize the predictability of all behavior in the organization	be open for new initiatives that have not yet forseeable consequents
be intolerant for breaking rules	test rules regularly on promoting the progress of the organization or inhibiting developments. Breaking rules is judged in that perspective.

Manager's burning concerns

When managers are asked what is most challenging for them many answer: „How can you motivate people so they applicate consequently all you learn them, especially when you are not present? And I want them to take initiatives for improvement of efficiency, effectiveness that benefit the company. Not waiting for instruction of the management.'

Of course they know: there are no recipes with permanent solutions. Improvement is a daily concern of management. People have ideas they might share but it is a daily concern of the management to get these on the table. People have a learning history in which they got punishment because

they did not do something and at another moment they got punished for doing something. Like the two heads of tsunami-warning-systems. One gave no warning and a tsunami hit the land. He was fired. Another gave a warning and there was no tsunami. He was fired too. What is good or bad is in the hands of the management.

Managers must be able to communicate at two levels at the same time. „It was good you took an initiative and you must go on doing that". That is level on. Level two is " the content was not good, because…." Learn people to become experts.

Suggestions for Managers

First of all managers take a *learning mindset*. Small steps ahead every day, close supervision on the execution of the standardized procedures. Learn to think as an expert by analyzing and measuring what is going on in teams.

Second, managers *transform impatience into a daily focussed committed learning attitude*. There is no substitute for the eye of the master.

1. Every change must have a recognizable *benefit* for those who have to execute the change. The benefit is often in better performance in the task.

2. *Work in teams*. Not the hierarchical way: ‚I tell you, you tell them, he tells others….. Demonstrate, investigate, agree, disagree. Systematic follow up and close supervision. Ask yourself what has to be supervised daily? What weekly?….

3. You know you cannot change your habits in one day even when you really want. Others need constant *support in changing their habits*. You have to give that support.

4. Standardisation of all work processes is necessary for effectiveness and efficiency, managers have to work on that continuously. But changes in conditions happen any moment so regularly reflect on the….
    I. ….functioning of a specific procedure. Can it be improved?
    II. Although a procedure is executed correctly, consequents may arise that are unfavorable. Think and investigate before acting and changing the procedure. Even in emergency situations there is time for thinking before acting.

5. Management learn the habit of telling *,stories'* where they ,visualize' the coherence of an activity with what is done before and what comes after a specific task. They tell the story, once, hundred times. Instructions are given in coherence with the whole working proces.

6. Implement *fact based thinking*. Let the workers measure the output and proces. Help them develop standards. Help them to interpret the results. Learn them to think ahead on possible consequents of an action and judge the possible output. Encourage them to do small isolated experiments so they observe consequents of a change of procedure on a small scare. Decide on wether this change is beneficial before implementing it in full.

7. Modern video taping techniques make *instructions* available anytime everywhere. Preferable recorded on the workplace when a manager instructs. Use these on the workplace. New employees see these movies in their introduction. Other look at it again and again. Managers refer to it.

8. The basics of the quality improvement is *reflecting regularly on the quality* of what is done. Based on measuring all important cues (Key Performance Indicators). All workers are involved when Results are presented and discussed. The specialist for the quality is always present and give support. He shares all his knowledge in groups.

9. *Select employees* who are raised in a family tradition where
   a. ….it is normal to .learn by experience, improve their own craftsmanship and share it with others
   b. …..present actions are valued against realising long term goals
   c. …..sharing concerns on the workplace is normal and all can participate in the discussion

10. A manager never gives orders directly in the firm with surpassing lines of hierarchy. They always work with *all involved* and let no one lose face.

References:
(1) Chris Argyris, On organisational Learning, 1999, Wiley-Blackwell
(2) L. U. de Sitter, Synergetisch Produceren, 1994, Van Gorcum & Comp b.v.
(3) T. Talhelm, Large-Scale Psychological differences within China explained by Rice versus Wheat agriculture, in: Science, vol 344 (603-608) 9 May 2014

(5) Claude M. Steele, Whistling Vivaldi, 2011, Norton paperback
(6) Klein en Kahneman, chapter 10 ‚Insight' in: John Brockman (ed.),
        Thinking, 2013, HarperCollins
(7) Robert J. House (ed.), Culture Leadership and Organisations, 2004, Sage
        Publications
(8) Edgar H. Schein, Organisational Culture and Leadership, 1985, Jossey-
        Bass
(9) Peter Senge e.a., Presence, 2005, Nicholas Brealey
(10) Henry Mintzberg, Structure in Fives, 1983, Prentice-Hall
(11) Ton Voogt, COWORKING, 2014, Parthenon

Ton Voogt services management and organization with consults on cooperation, leadership and self management. Trained as a psychologist, he contributed 35 years to a consultancy firm in The Netherlands as a CEO and member of the board. From 2011 on he consults in private practice in Europe, Singapore and China.
More on his website: www.tonvoogtconsultancy.com His email address: tonvoogt@xs4all.nl