

Team C

Efficient Software Development

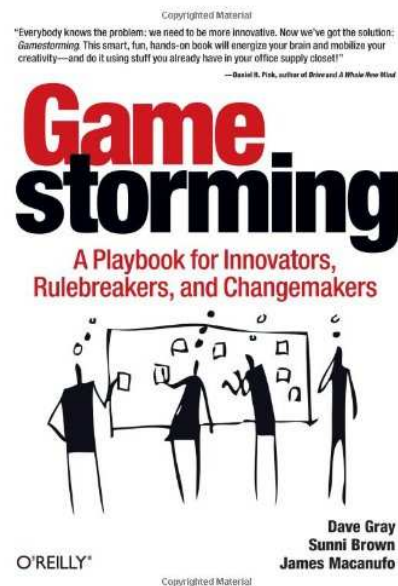
Executive summary

Challenge

- "...when we empower teams, the IQ of the individuals actually goes up—that is, we actually get smarter! And, sadly, the opposite is true: Controlling teams actually causes team members' individual cognitive power to decrease..."
- We constantly need to help teams – without controlling them; we need inspiration from others to identify potential problems and possible improvements

Solution?!

- **Cookbook** - Create a description of how software companies work today – select a number of small and large companies located in Sweden
- Describe different way of working
- Describe best practice in way of working,
 - include the circumstances and environment
 - Wich parameters influence the work
 - Describe the impact of the different parameters



Examples presented with “summary”

First example: From Nokia Beijing – the Nokia example is described here

<http://agileblog.danskerne.se/#post13>

In the example, we used and tried out the inspiration we got from Scrum on SW maintenance, we found that it did not work, but we changed it to match our environment and what we thought was best, as result we got some KanBan variant (which we did not know about at that time) and we also got 70% performance improvement due to task switching penalty, the task switching was completely new to us and un-expected and positive surprise!

We had probably never achieved this unless we had inspiration from the outside – modified to our environment...!

Second example: From our creative week preparation at Sony – the example is described here

<http://agileblog.danskerne.se/#post26>

In the example, we used inspiration from “[Gamestorming](#)” to create a workshop to generate new ideas and awareness about all our ideas among our SW developers who was soon going to start their creative week.



Problem

- The most important parameters when we want to compete on the global market is our way of working; there is no way we (Sweden) can compete on salary.
- Companies face many challenges today, the companies try to solve or mitigate the challenges; the environment and the world is becoming more and more complex, it is difficult to get inspiration to solve the challenges you face, it is difficult to know who to listen to and who to trust.
- It is not always possible to see the problems when you are standing in the middle of them, moving forward often require that you either lift the problem to another level, get inspiration from other and still it is not always that you manage to find what you are looking for.
- It would be great if we could have an independent analyze of the challenges, collect a large amount of different solutions to different problems and describe what they tried to solve, what they learned and if/how it helped.
 - I believe Theme C should focus on collecting best practice, what to look for, why different things works or not etc. – it should not be a list of questions on a web page, theoretically I think the best approach would be to clone someone like Tom Demarco (Tom Demarco wrote the book Slack – Tom has been a senior consultant for many years, and he wrote down some of his experience and learning's through life), let him travel to a lot of companies, work with them or use time to interview people with hand on experience, let them describe what they have learned, what works, what does not work, what are the challenges they see etc. – and create a collection of “stories” to be used as inspiration for others, like [“Gamestorming”](#) by Dave Gray, Sunni Brown and James Macanufo.
- Things that works today in the team may not be best practice tomorrow, small things may change and generate new challenges, as a manager or a coach, we need to address the obstacles, find out if something could be improved and what can help, we need inspiration from the outside and luck (the Nokia example was not trying to solve a problem with developers working with concurrent tasks, but we found this improvement as a result of measuring and testing)

Ideas

Describe different parameters that has influence on our work

- Inspiration, challenges, cooperation, information, constantly improving... We need to re-think and constantly consider how we work, we should not constantly change our way of working - unless it has a positive effect – but we need to get away from our current way of working where we imagine ourselves that current way of working is good enough.
 - Psychological
 - Influence – some people can only work if they decide all, some want very precise description of what they shall do, what is the impact on the work, i.e. Is the work done better if you have influence? and which signs should you look for to improve the work?
 - Motivation, what motivates people, how do you know what works for whom?
 - Task switching – what is the impact of task switching, some say we lose 20% efficiency for each extra task we have, is this correct, does it have same impact on all kind of work? Why do we continue to task switch?
 - Work load, what is the impact of high workload? Can you be innovative if you have high workload? Will you automatically be innovative if you have time over? Does high workload slow you down? If so, what is the limit and how do you find out (assuming it is individual). One of the biggest challenges we have today is our lack of time to reflect – we are constantly overloaded with work,
 - we don't take the time to reflect, we don't take the time to discuss with others, some do retrospect (Agile's lesson learned) but it is not always enough to spend ½-1 hour per sprint to list things to improve, it might help, but often the team cannot see the challenge themselves or do not want to deal with the challenges.
 - Improving our way of working, it makes a huge difference how we work, most of us (all?) don't have time to find ways to improve our way of working, often we believe that we are effective as we are, but a simple example from Nokia in Beijing showed that becoming 70% more effective is possible, we should constantly look at how we work and consider if there are better ways – the Nokia example is described here <http://agileblog.danskerne.se/#post13>
 - Organizational impact
 - Strong time to market (TTM) requirement
 - Commitment done by management on behalf of development team

- Quality understanding, i.e. "Delight the customer", "Low number of issues", "Easy to maintain" etc.

Describe different way of working

- When are the different way of working most effective, what are the challenges, how can we overcome them
- Team work, we often talk about self organizing teams, FIRO model for teams, I read this the other day <http://www.agileconnection.com/article/empowering-agile-teams> "...when we empower teams, the IQ of the individuals actually goes up—that is, we actually get smarter! And, sadly, the opposite is true: Controlling teams actually causes team members' individual cognitive power to decrease..."
- Team work, the challenges we face today is getting more complex and require more than one person to solve it, there are many ways to handle team work,
 - A bad example is when people are treated as resources you can move around as small chess pieces, i.e. estimate the work, allocate number of resources and give them a blueprint, it works, you get the job done, but it is pretty old fashion and inefficient.
 - Spotify is a good example of a company who take team work serious, they may not do all right, but they got one thing (most likely many things) right, they are constantly working with their way of working, they have coaches who constantly try to improve things – more reading can be found here: <https://dl.dropboxusercontent.com/u/1018963/Articles/SpotifyScaling.pdf>
- Individual work – not everyone is working well in teams, how do you find out if people work well in a team, what can you do to solve it?
- Agile vs. Waterfall work, is that the only options, or can we use the best from each and create a constantly improving way of working and how do we spread the best parts?
- Etc.

Describe best practice in way of working – include the circumstances and environment

- Most of us (all?) don't have time to find ways to improve our way of working, often we believe that we are effective as we are, but a simple example from Nokia in Beijing showed that becoming 70% more effective is possible, we should constantly look at how we work and consider if there are better ways – the Nokia example is described here <http://agileblog.danskerne.se/#post13> in this case we solved a problem we did not know existed.

- Document what signs to look for
- How do you identify problems
- How do you improve your way of working?
- Document how it helped
- Document how you measure improvements

Solution?!

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