

1. Self managing teams - Feasible or fantasy?

In this paper, we review what drives autonomous workgroups and provide a review of the research on autonomous workgroups and our own recent experience.

1.1. Introduction

The idea of a self managing team (SMT) is appealing to most managers and organisations, but they turn out to be quite hard to set up and sustain. By self managing team, we mean a group of people working together to deliver a project without needing a specific leader or manager to control and direct the group's activities.

I (Craig) was thinking about how the XPDesigner project team is working because my role in the project is, for all practical purposes, a team member working on one part of the project, rather than a formal Project Leader. It struck me that we are indeed operating as a self managing, autonomous workgroup.

The interesting thing about SMTs is that the research in this area, coming out of Socio-technical systems theory and other organisational development frameworks, indicates that it is hard to predict when they are likely to be successful. Attempts at fostering SMTs do provide benefits for the short term, if you can successfully set one up, but their long term sustainability can be difficult. There are also many intervening factors that make it hard to definitively state why (and when) they do or do not work.

In our project, it appears that goal commitment (that is, everyone is committed to the project because of the end goal it will deliver) is making a significant contribution to the group's ability to self manage. In essence, the goal commitment is shared amongst the team members and is acting as a *de facto* leader. I use 'leader' in this context to mean a person who is creating the vision for the project and using appropriate influencing skills to motivate and drive people towards goal completion, rather than a 'manager' who directs and controls the group on a day-to-day, tactical basis.

Because the goal appears to be uniting the group, the team can then engage in one of the successful problem solving strategies called 'means-ends analysis'. That is, as activity continues, people can evaluate whether the activity they are engaging in is contributing to the achievement of the end goal. That is, whether the 'means' (activities) lead to the 'ends' (goals).

As a good psychologist, I'm constantly observing things, looking for events and patterns that suggest something interesting is going on. So I asked Erin, a member of the XPDesigner team and another psychologist to do a quick bit of research into SMTs to find out if others had experienced what we have.

This paper will be a bit more academic in nature, but I hope you find it interesting and can possibly apply some of our learnings and the general research in your own organisations.

1.2. Literature review of self managing teams

Autonomy, defined as 'the degree of freedom, independence, and discretion in scheduling work and determining procedures that the job provides', has been classified as one of five different ways in which job enrichment can be promoted (Muchinsky, 2003, p.399). Various initiatives have been undertaken in organisational contexts to improve the performance and productivity of employees and organisational functioning in general.

Autonomous workgroups have been described as 'interdependent collections of individuals who share responsibility for specific outcomes' (Sundstrom, De Meuse, & Futrell, 1990, p.120). We'll provide some background to the research in the area that has shown various implications for organisational design and operational management.

Autonomous workgroups were derived from the movements surrounding sociotechnical systems theory, where attention was afforded to both the technical and social systems in the workplace (Parker, 2002; see also our paper on sociotechnical systems theory). Sociotechnical systems theory was developed through the analyses of job processes in the mining industry, which revealed a somewhat awkward interaction of the social and technical elements of the organisation (Trist & Bamforth, 1951). Sociotechnical systems theory promotes the simultaneous maximisation of the benefits from both the technical and social systems by considering the ways in which each system works with the other (Pasmore, Francis, Haldeman, & Shani, 1982).

Autonomous workgroups were promoted as a method for improving the interaction between social and technical systems. Allowing teams to manage themselves, make their own decisions, distribute their own resources and control their own inputs was thought to be an effective method for improving work performance (Parker, 2002). A study that reviewed 134 applications of sociotechnical systems theory to organisational functioning revealed that autonomous workgroups were one of the three most popular methods for restructuring organisation designs (Pasmore et al., 1982).

A limitation noted by the authors of this study, however, is that the long-term benefits of the organisational restructuring initiatives were not reported, resulting in an inability to determine the enduring success of autonomous workgroups (Pasmore et al., 1982). Lack of outcome and follow-up measures available for determining the success of autonomous workgroups and other sociotechnical system interventions have been noted as a limitation of the theory (van der Zwaan, 1975). Another limitation surrounding the measurement of the benefits associated with autonomous workgroups is the apparent inability to control for confounding factors; studies that show some benefit from autonomous workgroups also show some negative consequences, but these cannot often be separated from other influences on the outcomes (Parker, 2002).

Other studies have demonstrated the positive effects of providing employees with more autonomy and choice over their work, such as reduced absenteeism and improved performance ratings (Bond & Bunce, 2001). Another recent study showed that control over work can reduce the amount of employee fatigue (Hockey & Earle, 2006).

Apart from the above stated definitions, there appears to be no exact definition of how an autonomous workgroup operates and what motivates the group to carry out their work and carry it out as a team. In fact, there appears to be very little research on the factors that contribute to group cohesion.

One study that investigated group ability, self-efficacy (that is, the group's belief that they could carry out the tasks) and goal commitment found that group ability was a significant predictor of performance. The study also found that how capable the group believes themselves to be (called 'self-efficacy' in psychology-speak) predicted performance regardless of how able the group actually is. Group goal commitment, however, did not predict performance (Hecht, Allen, Klammer, & Kelly, 2002). Therefore, although there is no suggestion as to whether or not goal commitment acts as the cohesive force between group members, it does appear that performance is not predicted by the degree of goal commitment.

Although further confirmatory and exploratory research is required to eliminate potential confounding factors and to clarify the benefits and pitfalls of autonomous workgroups, work designs such as autonomous workgroups may offer advantages by promoting employee health, satisfaction and productivity which, in turn, can result in greater organisational performance. Interestingly, research into the mechanics of autonomous workgroups appears to be limited. Hecht et al's (2002) study does suggest that group ability and belief in the group's ability can predict performance, however there is no suggestion that a common group goal predicts performance or acts as any cohesive force for autonomous workgroups.

1.3. Our experience with SMTs

The brief literature review Erin conducted shows that there are many things that are unanswered in terms of how to set up an SMT, the causal factors of their success and the long term benefits for organisations. Interestingly, there is no evidence to support the role of goal commitment in performance, but the evidence is inclusive regarding its role in group cohesion.

So what does that mean for my observations of our XPDesigner team? The research got me thinking about the causal factors behind the success of the team in terms of its cohesion and progress on the project. The team has made numerous advances in how we think about user interface design so as far as I can see, it is also performing very well, having achieved milestones and satisfied AusIndustry's requirements to date.

We all know that when it comes to explaining things where people are involved, it's not easy to say that one or two things are the key drivers. There are numerous things that come into play, as well as the interactions between key drivers. For example, we might identify that a number of key drivers are important, but it is only when they happen together that we get the desired result.

Let me give you some insights into the different phenomena at PTG that have influenced our ability to successfully form and sustain a self managing team. Some of them will appear obvious as important factors in performance, but consider the other factors and that all of them work together. It's probably not enough to only have a few of them operating.

There are four things I'll cover:

- ◀ Organisational culture,
- ◀ Management practice,
- ◀ Selecting the right people,
- ◀ The project.

1.3.1. Organisational culture

PTG is run as a meritocracy where the most important thing is merit, performance and ability. Interestingly, the working environment is collegial in nature, and does not have an unhealthy competitive element sometimes found in pure meritocracies. People work together and support each other. Our meritocracy is manifest in selection, promotion and remuneration practices, where tenure, gender and other non relevant factors are removed from the equation.

People are encouraged to work in teams and autonomously, depending on the nature of the project. They are self-motivated and activity is driven by project timelines and a desire to produce quality result for the customer. Most of the work is project driven and has a clear start and end, and visible deliverables.

1.3.2. Management practices

Day to day management practices by our team leaders has made a significant impact on the culture. We allow people considerable empowerment in how they approach things, but the project and company methodologies provide a boundary. In fact, one of the team recently commented to me that she was talking with her friends in other consulting firms and they were surprised (and a little envious) that she had so much autonomy in her job to operate.

It is generally the case that when there aren't boundaries, it provides uncertainty for people and you often see activity that is not right – mainly because people have little to compare to. It's well known that decision making when relative to something is generally superior.

We also avoid micro-managing people. Because the project and methodologies provide such strong boundaries, there is very little need to 'keep on top of people'. They are trusted to perform within the boundaries and the organisational culture reinforces the focus on performance and outcomes, providing people the direct self-collected feedback that they are performing well and are on track.

Micro-management is an interesting phenomenon because I see it setting up self-reinforcing loops. It generally starts with managers being promoted from technical / specialist roles into management positions because they are good at what they do. What people don't realise is that just because you're good at a technical role, doesn't make you good at managing people. These experts who have been promoted find it difficult to trust others to do as good a job as they do. They end up either doing the work or micro-managing others.

When people are micro-managed, it perpetuates the lack of trust and people end up not doing anything interesting or independent, in attempt to avoid the negative feedback coming from their manager about how well they 'cannot' perform the job.

We also have clear performance targets for people, again, so they can monitor their own performance and they know they are doing the right thing.

We also take feedback very seriously, with both positive and constructive feedback being provided on a structured basis every 3 to 6 months but, most importantly, feedback is given on an as-needs basis. That is, as soon as it is required, it is provided to people to recognise and reinforce something they did well, or to provide corrective feedback.

We also take the time to consider mitigating and contextual circumstances. For example, if a person was given a poor brief, then it is not reasonable to expect them to deliver a stellar result. Or if they have been given a new task for the first time, we cannot expect them to get it right the first time.

People also have an opportunity to describe how they saw things unfold and invariably we find that things are more complicated than we might think. I think people genuinely want to do the right thing and if you treat people as such, you're more likely to get that. The opposite also applies. You can read more about these concepts in our other paper on 'Why people do what they do'.

It may all seem obvious, but expecting others to perform as well as we can is such an easy trap to fall into.

1.3.3. Selecting the right people

Selection is one of the hardest things to do in terms of getting the right people into the organisation. Unfortunately most people use the interview which has only a little more predictive validity than flipping a coin. For selection, the best tools to use are intelligence and personality compared to a job and person profile and the assessment centre. Your HR department can tell you more about these, so I'll stick to the characteristics I've found to be most important in selecting the right people.

There are two things I look for in candidates are how smart they are and how manageable they are.

A person's intelligence is important because it is one of the strongest individual predictors of future performance. It means they can think well, reason well and make good decisions. With more and more jobs being about information and decision making, this is a critical driver of success.

Manageability is important because in the initial stages of someone's experience here, it's important that they can take direction, follow the methodology and processes and absorb the organisational culture. This doesn't mean I don't want people who think independently, or challenge the status quo. Rather, it's that at PTG there is a framework and process in place that works well that needs to be maintained.

However, we encourage people to critique things and as people become more skilled in our processes, they can make significant contributions to improving our methods. This is where their intelligence and reasoning skills come in. It's not useful to merely criticise some methodology or process without having an alternative.

1.3.4. The project

Finally, there is the project itself. It's important to consider how the team was initially formed.

I had initially held with each person to ask if they would like to join the project. After a week or two, all had come on board. The most important aspect of them joining the team is self selection – that is, they chose to be part of it.

One of the other important aspects is that the project is partially funded by an AusIndustry Commercial Ready Grant. The process is competitive and we had to demonstrate to AusIndustry that the project has been well thought out and, although there is risk in actually being able to achieve the actual goal, it is likely to deliver and will make a measurable contribution to the country. Because the project had passed government scrutiny, it gave a sense of reality to the project and that we were all working on something important.

Further, because we are spending taxpayers' money, it makes the project very important to us and guides our conduct such that we strive to provide a return in investment.

In our context, the project acts as a strong cohesive influence, providing people the clarity of the end goal and the ability to determine the necessary activities to reach the end goal. The goal is not just our own internal view of what's important. The external validation elevates the relevance and meaningfulness of the project and its goal.

1.4. Conclusion

You can see there are a bunch of things we do at PTG to provide a healthy, high performance working environment for people. It's unsurprising that the research into SMTs is not conclusive. There are so many things that probably need to be in place for it to work.

It's virtually impossible to single out any specific factor that makes a self managing team work best, other than to say it's a combination of all of the things our people do (and probably some more things that I'm probably not even aware of).

If you're a budding PhD candidate, then there's plenty of work to do to understand more about organisational culture, management practices and people to determine how SMTs can work best.

In the meantime, I think we've identified a winning formula. If you're interested in knowing more about how we do things at PTG, please call or email me on (02) 9251 4200 or craige@ptg-global.com

1.5. References

If you're interested in reading some of the more technical literature on SMTs, here's a list of books and articles we researched in preparing this paper.

Bond, F.W., & Bunce, D. (2001). Job control mediates change in a work reorganization intervention for stress reduction. *Journal of Occupational Health Psychology, 6*(4), 290-302.

Hecht, T.D., Allen, N.J., Klammer, J.D., Kelly, E.C. (2002). Group beliefs, ability, and performance: The potency of group potency. *Group Dynamics: Theory, Research and Practice, 6*(2), 143-152.

Hockey, G.R.J., & Earle, F. (2006). Control over the scheduling of simulated office work reduces the impact of workload on mental fatigue and task performance. *Journal of Experimental Psychology: Applied, 12*(1), 50-65.

Muchinsky, P.M. (2003). *Psychology applied to work: An introduction to industrial and organizational psychology*. Belmont, CA: Thompson Wadsworth.

Parker, S.K. (2002). Designing jobs to enhance well-being and performance. In P. Warr (Ed.), *Psychology at Work* (5th ed.) (pp. 276-299). London: Penguin Group.

Pasmore, W., Francis, C., Haldeman, J., & Shani, A. (1982). Sociotechnical systems: A North American reflection on empirical studies of the seventies. *Human Relations, 35*(12), 1179-1204.

Sundstrom, E., De Meuse, K.P., & Futrell, D. (1990). Work teams: Applications and effectiveness. *American Psychologist, 45*(2), 120-133.

Trist, E.L. & Bamforth, K.W. (1951). Some social and psychological consequences of the longwall method of coal-getting: An examination of the psychological situation and defences of a work group in relation to the social structure and technological content of the work system. *Human Relations, 4*, 3-39.

van der Zwaan, A.H. (1975). The sociotechnical systems approach: A critical evaluation. *International Journal of Production Research, 13*(2), 149-163.

2. About the primary Author

Craig is the founder and Managing Director of The Performance Technologies Group (PTG Global), with over 15 years in user experience, user interface design and change management.

Craig runs the R&D function at PTG, having produced a number of world firsts including XPDesign – the first systematic methodology for user interface design and Certified Usable – the first guarantee for usability and user experience.

Craig has been the primary architect behind many of Australia’s most popular websites including CBA, Virgin Blue and ASIC and works on cutting edge technologies such as touch, medical and special-purpose applications.

Craig holds a Masters qualification in organisational psychology, is a member of the APS and the APS College of Organisational Psychologists and is a Registered Psychologist in NSW. He is also an Associate of the University of NSW and Macquarie University.



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