

COLLABORATION PLATFORMS AS ENABLERS OF NEW WORK - THREE CASE STUDIES ON ORGANISATIONAL PREREQUISITES FOR CHANGE

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ABSTRACT

Purpose: Collaborative applications have the potential to support a new, networked and self-directed form of collaboration, currently propagated by many companies as “new work”. However, the deployment of new technologies does not automatically lead to new forms of work. There are a number of inhibiting or promoting factors to be considered. An important factor influencing the extent to which technological possibilities can be realised is the form companies organise work. The aim of this contribution is to analyse the interrelation between the use of technology and the ways of organising work, using three case studies on collaboration platforms as examples. We want to describe how the use of collaboration platforms affects organisational change and examine the conditions that promote or hinder a change to “new work”.

Theory: We argue on the basis of John Child's theory of organising (2015), which assumes a fundamental shift from conventional to newer forms of organising. It provides a framework for the empirical analysis of organisational practices.

Approach: This contribution presents findings from three qualitative case studies of medium-sized enterprises (special mechanical engineering, IT consulting, software development) with an advanced use of collaborative applications. The enterprises are located in various sites in Germany and abroad. Our research is based on a longitudinal mixed method and multi-methods approach. We have accompanied these enterprises over three years, implementing and testing an integrated “digital workplace”.

Findings: The case studies reveal that the main challenge of the adoption and use of collaboration platforms is not the command of the technology but rather the complex change in the ways of working and organising. We have found new forms of software-supported collaboration in all three cases, but to a varying degree. This is based on the design of the usage options and authorization concepts of the collaboration platform. It must be decided who is entitled to form groups with whom and who may share content with others and to what extent. Furthermore, the concept of control associated with the use of platforms plays a central role. In the context of an “imposed” design, more traditional ways of working are encouraged, while an “emergent” design of a collaboration platform encourages the development of “new work”. The case studies suggest that the full potential of software-supported collaboration can only be realised when traditional conceptions of control are overcome.

Originality/value: There is a growing range of literature on adoption challenges of enterprise collaboration systems, however, to date we do not know of any similar case studies on the interrelations of the use of collaborative applications and the forms of organising. Our case studies differ from other companies in their extensive use of collaborative applications.

Keywords

Collaboration platform, organising, work design, organisational change, new work

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1 INTRODUCTION

New ways of working are currently high in demand. Numerous companies present themselves as “new work” companies with new forms of flexible work at any time any place. Simultaneously, collaboration platforms are increasingly being used (Schubert and Williams, 2015). They include tools for communication, task coordination and sharing knowledge and enable to work anywhere, anytime (Hardwig *et al.*, 2020); and they are designed to support teams and also to improve company-wide collaboration. Customers or other external parties can also be integrated.

One might suspect that the massive use of collaboration platforms will considerably promote the transformation away from hierarchical, bureaucratic organisations to “new work”. On the other hand, one should not overestimate the importance of technology. “(...) technologies alone do not suffice to apprehend the ascent of the ‘new world of work’. A plethora of other forces and factors at the meso, macro and micro levels have shaped how work practices have evolved (...)” (Aroles *et al.*, 2019, p. 287) Against this background, the following contribution will analyse the interrelation between the use of technology and the way work is organised, using three case studies of collaboration platforms as examples. The question is how the use of collaboration platforms affects organisational change. Under which conditions does it promote or hinder a change to “new work”?

2 NEW WORK AS NEW WAY OF ORGANISING

“New ways of work” in a narrow sense are defined as “place- and time-independent working” (Popma, 2013). Under the motto “Bricks, Bytes and Behaviour” propagates the “Smarter Working” movement (Lake, 2015) location-independent, networked forms of work. The slogan emphasises the necessity of a simultaneous interaction of the technologies used, the change of spatial conditions and the work culture (Clapperton and Vanhoutte, 2014). “New ways of working” are seen as part of a long-term trend of workspace differentiation and flexibilisation, which includes the flexible use of home workspaces, mobile working and the office space trends of shared desktops (Kingma, 2019). These new forms of work have seen a relevant increase over the last years (Spreitzer *et al.*, 2017).

For the purpose of our analysis, we refer to Child (2015), who describes the historical change of organisations from conventional to new, networked forms. This change expresses itself in fundamental transformations that affect the three fundamental processes of organising: “*Integration is concerned with ensuring that there is adequate coordination between the different but complementary activities that create collective value.*” (...) “*Control involves setting goals, implementing them, and monitoring their attainment.*” (...) “*Reward is a process fundamental to engaging the motivation among members of a company to contribute positively to the achievement of its goals.*” (Child, 2015, p. 9). New forms of organising break with central principles of conventional forms of Tayloristic or bureaucratically centralised organisations, following a “*different paradigm - a new way of thinking*” (Child, 2015, p. 74). They have been proven to be more suitable to dynamic market conditions. We understand “new work” as part of this change.

According to Child, the new way of *integration* relies on a horizontal coordination in decentralised units or teams with an increased collective responsibility. Instead of a hierarchical coordination with formal procedures and roles, activities are now coordinated using flexible and direct contacts on the team-level or via information technology inside the network. Bureaucratic *control* and output control are replaced by decentralised control strategies. The new rational is an internalised compliance instead of external constraints. Thus, control is exercised through negotiated objectives and shared cultural values and norms. Leadership by authority is replaced by leadership by guidance of more or less self-organised teams. *Reward*: In order to promote the motivation of the knowledge workers, the organisation of work relies on autonomy and self-organisation of teams, giving room for personal development. Rewards are based upon group performance instead of one’s individual hierarchical level. In addition, the quality of work, the modernity of the workplace and the freedom to work anywhere and anytime play a central role. Herein lies the most visible part of “new work”. Collaboration technology is a central enabling factor of the new network concept. “*With the aid of new technologies, companies can more readily strip out layers of management and shift the pattern of communications from a downward flow along prescribed, hierarchical routes to a more multidirectional and networked process.*” (Child, 2015, p. 96)

In order to take a closer look at the conditions under which collaboration platforms promote this development, we present in the following our empirical findings by describing the relationship between the use of the platform and the changes in the three dimensions of organising. Thanks to fortunate circumstances, all three companies have used the same product, MS Teams. Hence, we rely on three case studies: A special mechanical engineering company with 370

employees worldwide (M), an IT consulting firm with about 90 employees (C) and a company for software development (S) with 235 employees. We accompanied these enterprises over three years, implementing and testing an integrated “digital workplace”. This contribution focuses entirely on the use of MS teams, leaving out many facets of the topic for reasons of focus. The case description is based on an initial analysis of 36 qualitative interviews held in the first year of the project and 42 interviews and 11 group discussions conducted in the third year. We interviewed employees and managers who used collaborative platforms and those responsible for work design.

3 THE INTERACTION BETWEEN ORGANISING AND COLLABORATION PLATFORMS IN THE CASE STUDIES

3.1 Case M: The global network of a special mechanical engineering company

The company M has grown strongly over the past ten years and recently established two new sites in Asia and South America. The collaboration platform was first implemented in order to support global teams and the forms of usage were developed with these teams under the personal direction of the CEO. There was no release for use by all employees. Instead, management determined who was allowed to form groups with MS Teams. This was based on processes and structures in the organisation. Tight authorisation concepts were defined for the access to content. The teams using MS teams established new forms of collaboration that were appreciated by those involved. For example, all documents of the team were stored in a central repository. They could be edited by all team members. Asynchronous “conversations” in written form took place on the platform, in which the status of task completion was reported or questions could be discussed. In some cases, task planning was also used for joint task control. The platform was useful when developing concepts and storing or documenting knowledge in a structured way. Users also had access to a central wiki system in which the essential information for plant planning was exchanged. Web conferencing was also operated via the platform. This form of collaboration went far beyond the previous phone and email communication and the new form of collaboration is therefore indispensable for the global teams, but it is also considered very advantageous for local collaboration.

As the benefits were recognised by the employees, there was strong criticism of the dominance of management and the limited opportunities to use the platform. There have been many efforts by employees and also by managers to use MS teams independently. Top management resisted and even made sure that IT shut down unofficial MS teams to avoid ‘wild growth’. This caused much disappointment. A second point of criticism related to the expectations of transparency formulated by management. Ongoing status reports on the progress of work should be communicated on the platform, but here, the employees were a little reserved. This is expressed in the fact that problems are not named precisely to save face in order to avoid management intervention. It is also questioned by some whether it is relevant for the team to communicate “every little thing”. These points touch on the control dimension of organising. Top management has made it quite clear that they want to use the collaboration platform to improve control. This is to be achieved through increased transparency in the status of task fulfilment. Teams should document better and report more strongly. The expectation that MS Teams should also serve to improve management control is made clear further by the expansion of the use of MS Teams for the weekly management round.

3.2. Case C: Collaboration in interdisciplinary customer projects teams

The IT consulting company offers customer-specific solutions for social intranet and digital workplaces. The company is very much characterised by spatially distributed work, which takes place across three locations, home offices and the customers' offices. It has been using collaborative applications for many years. The driving forces are the high dynamics and complexity of interdisciplinary cooperation in customer projects. The introduction of MS Teams took place before the background of shifts in the market for collaboration platforms. The company adapted its product portfolio to the market leader. This was taken as an opportunity to replace older solutions and to rely on MS Teams. The switch has not resulted in fundamentally new forms of collaboration because the new possibilities created by M had practically existed before. Nevertheless, the fundamental difference was that the employees had a far-reaching transparency of all content stored in the collaborative applications and the freedom to contribute to it. Company-wide collaboration thus differed from M in that employees were able to form communities and basically also had access to the content of other projects. MS Teams now offers a uniform platform on which the various functions are more closely integrated. The increase in user-friendliness leads to intensifying collaboration, for example, to a more intensive use of web meetings. Beyond that, management resolved closely-defined documentation processes or strict rules for cooperation and placed greater emphasis on the self-monitoring of employees and teams. For the employees, the

network form of collaboration was facilitated by MS teams and has become a matter of everyday life. Criticism desiring more support and structure is sometimes voiced.

At no point is it apparent that top management is seeking greater management control by using the collaboration platform. Projects are controlled by project teams within the framework of target agreements, as was previously the case. The tool will give them better opportunities to exchange information and keep track of the status of work. Incidentally, top management has learned from previous experience and gives project teams more freedom to regulate their cooperation according to their own needs.

3.3 Case S: Company-wide exchange of knowledge and creation of a community

The software development company S, also has previous experience with collaborative applications. Productive work takes place in joint teams with customers. In contrast to case C, however, the aim is to locate the employees in locations close to their homes and home office is not offered. This is explained with the high intensity of collaboration in the company's agile work concept. Interdisciplinary teams manage themselves and coordinate their work independently. Since the parts of a team at the customer's and at a site of S should work together like a team in attendance, there is a permanent screen transmission. The team members can see each other as if there were a separating window between them and they can also talk to each other, if necessary. Until now, technology has served as a crutch to mitigate the negative effects of working at a distance on collaboration and cohesion in agile teams.

The new initiative for the use of the collaboration platform is intended to contribute to the networking of all employees in the company. The aim of the introduction is to create a digital workplace as an entry point into the corporate community. One might think that the main objective would be to achieve greater efficiency by replacing a large number of similar applications running in parallel with a uniform collaboration platform. However, by connecting all employees with MS teams, communication is also to be improved and knowledge is to be made available more throughout the company. It is also about promoting social cohesion and the community as a company with certain values of collaboration.

In this case, too, there is no sign of usage of the platform for more intensive management control. Rather, the initiative responds to suggestions to reduce the diversity of applications and to create a common solution for company-wide collaboration. It is part of the corporate culture to keep the status of projects very transparent. No question about it, this transparency also applies to the management. However, the use of the collaboration platform should – more than before - promote the self-monitoring of the teams and the integration of the employees into the corporate strategy through high transparency and the possibility of exchange via social media. The use of MS Teams will reinforce the control mode, which is based on (self-)monitoring via shared company values and target agreements.

3.4 “New work” as a reward

All three companies have to deal with the war for talents and try to increase attractiveness as an employer. “New work” plays a role of varying intensity in this. M does not deal directly with “new work”, but emphasise innovation, the good internal working atmosphere and builds new company buildings according to an open, transparent architecture. C addressed “new work” directly: Their offices are designed as open, transparent spaces and they actively communicate “new work” and the freedom to work anywhere anytime is put into practice in accommodating home office solutions. With weekly meetings in which all locations are virtually connected, they highlight the cultural element of “new work”; a lively community with team spirit and events. Similar company-wide meetings are also regularly held by S. Membership of the company community is emphasised through various activities. In addition, this company strongly emphasises its agile working methods, which are very consistently developed in the operative teams as well as in the management. In all three companies, the use of modern collaboration platforms acts as a sign of modernity. However, the limited use of the collaboration platform at M does not support the formation of a lively community of employees, while C – and even more so S – bring the technological potential of the platforms to life in the sense of “new work”. The platforms is explicitly used to promote free networking and the experience of a lively community. This is a strong incentive for higher qualified groups of employees with a strong need for autonomy and participation.

4 CONCLUSION

The three companies face different requirements due to their products and services, market conditions and corporate culture. Yet the drivers of the use of collaboration platforms are – in all cases – the needs of integration: global project teams, complex interdisciplinary customer projects or spatially distributed agile software development (Hardwig, 2019). Most of the employees do not need to be convinced of the benefits of collaboration tools, but request that such tools be provided by the company to facilitate collaboration. In some ways, working with collaboration platforms can even have a rewarding function. The freedom to use the latest IT tools, to network company-wide and to exchange via

social media meets the autonomy needs of many employees. This also applies to cultural aspects of agile work and working in new workspaces.

Significant differences can be seen in the way collaboration platforms contribute to control. Company M creates considerable unease because it does not support free networking and limits the transparency of content. The suspicion arises that the transparency created by the platform could serve to improve hierarchical control by top management rather than to improve self-monitoring by teams. This leads to a certain reluctance to use the platform. In cases C and S, the collaboration platform is not considered by the parties concerned from a control point of view and its use is generally assessed more positively. It seems that control over internalised values and objectives is not perceived as problematic by these employee groups. Transparency is more of a problem in the case of M, and in the case of S it is seen as a requirement to improve their performance. For the use of collaboration platforms, we can state that the critical point is the handling of control. Their use is more likely to support new forms of control based on shared values and agreed objectives, while corporate cultures with a strong orientation towards hierarchical control find it difficult to exploit the potential of the platforms.

In answer to our initial question: The three case studies show that the use of collaboration platforms can, although not necessarily, promote “new work” or new, networked and more self-organising forms of work. The same product can be designed and used very differently: In the case of M, there is little evidence that the design of the platform promotes “new work”; in the case of C and S, it obviously does. This difference can be described very well with the distinction of “*imposed structure*” and “*emergent structure*” of a team platform (McAfee, 2009). New collaborative applications differ fundamentally from earlier groupware applications and classical knowledge management applications because of their social networking features. They allow new modes of social interaction and collaboration because structures emerge from many more or less uncoordinated actions of different people. Case M demonstrates that not the technical features of collaborative applications but the possibilities provided by the actual work system define the active design principles: The conventional design principle (“*imposed structure*”) connects information and social exchange on the team platform with given processes and structures. By contrast, an “*emergent structure*” of a team platform allows free networking driven by its users. The cases C and S show how a design of the collaboration platform according to the principle of emergent structure can enable and support the development of “new work”.

This would now need to be examined more closely than possible here. One limitation of this contribution is that both the influence of earlier processes and the influence of parallel activities of work design in these cases had to be left out. Their inclusion would not have changed the result, but could have presented it in a more differentiated way, which gives better guidance to work design practitioners. For example, it would be necessary to analyse in more detail the extent to which new roles and responsibilities of employees and new leadership concepts for the successful use of cooperation platforms need to be developed in order to stabilise new, networked ways of working.

REFERENCES

- Aroles, J., Mitev, N. and Vaujany, F.-X. de (2019), “Mapping themes in the study of new work practices”, *New Technology, Work and Employment*, Vol. 34 No. 3, pp. 285–299.
- Child, J. (2015), *Organization: Contemporary principles and practices*, 2nd Edition, Wiley, Hoboken.
- Clapperton, G. and Vanhoutte, P. (2014), *Das Smarter Working Manifest: Wann, wo und wie Sie am besten arbeiten*, aixvox, Aachen.
- Hardwig, T. (2019), “Das integrative Potenzial "kollaborativer Anwendungen". Drei Fallstudien aus mittelgroßen Unternehmen”, *Arbeits- und Industrie soziologische Studien*, Vol. 12 No. 1, pp. 55–72.
- Hardwig, T., Klötzer, S. and Boos, M. (2020), “Software-supported collaboration in small and medium-sized enterprises”, *Measuring Business Excellence*, Vol. 24 No. 1, pp. 1–23.
- Kingma, S. (2019), “New ways of working (NWW): work space and cultural change in virtualizing organizations”, *Culture and Organization*, Vol. 25 No. 5, pp. 383–406.
- Lake, A. (2015), “SmartWorking. The Handbook 2nd Ed.”, available at: www.flexibility.co.uk.
- McAfee, A. (2009), *Enterprise 2.0: New collaborative tools for your organization's toughest challenges*, Harvard Business Press, Boston, Mass.
- Popma, J. (2013), *The Janus face of the 'New Way of Work': Rise, risks and regulation of nomadic work*, Working Paper 2013.07, European Trade Union Institute, Brussels.
- Schubert, P. and Williams, S.P. (2015), *Social Business Readiness Studie 2014*, Koblenz.
- Spreitzer, G.M., Cameron, L. and Garrett, L. (2017), “Alternative Work Arrangements: Two Images of the New World of Work”, *Annual Review of Organizational Psychology and Organizational Behavior*, Vol. 4 No. 1, pp. 473–499.