



Handelshøyskolen BI

MAN 51472 Leading in Digitized Workplaces

Termin:

Vurderingsform:

Norsk 6-trinns skala (A-F)

Term paper 60% - W

Predefinert informasjon

Startdato: 24-01-2022 09:00

Sluttdato: 30-06-2022 12:00

Eksamensform: P

Flowkode: 202210||11526||IN04||W||P

Intern sensor: (Anonymisert)

Deltaker

Erik Løvgren, Per Amund Solberg

Informasjon fra deltaker

Tittel *: Term paper final MAN51472

Navn på veileder *: Sut I Wong

Inneholder besvarelsen Nei

konfidensielt

materiale?:

Kan besvarelsen Ja

offentliggjøres?:

Gruppe

Gruppenavn:

(Anonymisert)

Gruppenummer:

Andre medlemmer i

gruppen:

Term paper

- Working title -

Hand-in date: 30.06.2022

Campus: BI Oslo

Examination code and name: MAN51472 Leading in Digitized Workplaces

Programme: Executive Master of Management

Content

Summary	ii
Background – issue identification	1
Analysis	3
Theory/solutions	9
Action plan	13
Reference list:	15
Attachment: Generall informacion DPD	17

Summary

In this term paper issue, we present how a new PRP-tool has affected two warehouse teams in our organizations. We will focus on how this new tool has been received differently in the two teams. We will describe their reactions and actions and try to explain their behavior. We find that the two teams need to collaborate more, and we point to possible solutions and present an action plan. This includes job crafting exercises and focus on leadership.

Background - issue identification

Our company is in the middle of launching a Project Resource Planning system (PRP) that will make a huge impact on the information flow, workflow, and how we cooperate in our organization. The system is a multimillion investment, and the expectations of what to achieve are high. It shall amongst other things "standardize and simplify workflows and routines, digitize and automate tasks and reduce duplication of work, and facilitate better management information and information sharing" (see Attachment Generell information PRP).

Our company's top management has established a PRP project management group with the mandate to specify, search, purchase and implement the system throughout the organization. In the information campaign leading up to system launch, they have stated that the new system will provide "a single, open and comprehensive system that is used by everyone" that will make us "work efficiently, equally and smartly throughout the organization" and secure that "updated information must be available to those who need it at all times". (see attachment Generell information PRP).

The main purpose is to contribute to more efficient work processes and free up time. But at the same time the PRP-team admits that some new tasks will also lead to parts of the production and resource planning being more job demanding.

In this term paper we look closely to one part of the production department of the company – the equipment warehouses – and how this new PRP-tool has affected the teams managing the warehouses. For these teams the tool provides digital booking and handling of all technical equipment, called Rentals module. Their part is an early launch of a module in the whole PRP system.

There are two teams that handle the company's equipment rentals. We call them Team A and Team B. They are organized in the same unit with the same manager. The staff consist of middle-aged men with lower education, who have spent the most part of their career in various roles within a production team

before moving to warehouse service. They handle the equipment from order (booking) to delivery, and they also send equipment to maintenance. Both teams work in large physical storage facilities with a great part of manual labor, and they handle a high number of deliveries both in volume and complexity. The rental module requires that all the company's equipment is registered in a database and the handling of rentals is done by checking items in and out.

Although the two teams are in the same part of the organization and have the same purpose, they differ in the way the staff handle the digital change introduced by the new PRP-tool.

Team A embrace the opportunities of the new tool and seem to believe that it will indeed be an effective tool that makes their workday more structured. They acknowledge that it is somewhat more labor intensive, due to the number of keystrokes in the software, but has come up and running fast and are now operating smoothly.

Team B have been at the same location for many years, and their type of equipment and ways of handling the rental has been unchanged for a long time. Their attitude towards the new system has been reluctant and negative, and their perception is that the system will disrupt good customer service and disturb the present workflow.

To achieve continuous learning and development and make sure we take use of the best practice it is important to have the two teams act as one. If we do not take full use of the opportunities presented by the new PRP system, we will not meet the expectations and return on investment goal set by the top management.

The two teams find themselves in the latter part of the integration process of the rentals module in the new PRP system. This has been a developing process while we have been writing this paper. We have been able to follow the whole rollout of the system. This has been the first pilot of this PRP system in our company. This module is now almost fully integrated in these warehouse units, and the rest of the company will follow successively with similar modules throughout 2022 and 2023. The full system is integrated in the whole company in Q1 2024.

Analysis

We, the authors of this term paper, work in the Production department management group. We have been working together in this management group since 2017, and we have worked several years in other roles in the department prior to this. We have followed the process of purchasing and implementing this tool closely, together with both staff managers and system managers. We have also been talking to and observing the warehouse staff as the system has been launched, and we base this paper somewhat upon these observations and conversations.

We did an informal questionnaire sent to people directly involved with the implementation of this new software at our warehouses. It was done by e-mail, and we wanted to know what went well, what has not worked, their perception of the biggest obstacle and their expectations before and how that matches their current analysis now that the system has been implemented.

Their roles range from team members of team A and B, their staff manager, and the person responsible for the implementation and rollout of the rental's module (system manager). The full read of these answers can be done in the appendix called Questionnaire.

Team A says that the registration of all the equipment has gone well even though it has been labor intensive. They have gained control and overview of all their items. The training was also a success. Especially the part after the system was in use.

Team B, on the other hand have had more of a struggle during the whole process. It seems that their routines or lack of such makes the use of this system complicated. This is pointed out by the Systems manager and the members of Team B. The timing of the rollout during "high season" in the winter is partially explained but cannot account for all the bugs.

When we look at Team A, they both talk and act dissimilar to their colleagues in Team B. The PRP system is supposed to "simplify workflows (...) reduce duplication of work (...) facilitate better management information and

information sharing" (attachment Generell information PRP), and Team A shares these expectations:

I had high expectations that VB would solve a lot for us who are responsible for production equipment. Both logistics, booking, control of where the equipment is at all times and what kind of equipment we are in possession of (Male, Team A, appendix Questionnaire).

Both warehouses deal with active customers that are used to helping themselves in a self-service manner. In the PRP system, the new workflow requires a registration of relevant rental data. Team A has been creating a new routine adjusting to this premise, where they have placed the responsibility on the customer to register required equipment themselves.

This is supported by the system manager in the survey. He says that "(...) the rollout at the A warehouse has gone incredibly well. From the very beginning, they have been concerned with registering equipment and have taken proper ownership of their own data."

This ownership-thinking is not present in the same way in Team B. They are more negative, focusing on that the system is heavy in terms of use. There are many keystrokes needed to perform a check-in/check-out procedure. "*The system ties people up to the computer*" (Male, 54, team B, Questionnaire). In conversation with their staff manager and us in the management group, Team B has been reluctant to change the way they meet their customers. They don't believe that the system is suitable for their workflow. Thus, they are certain the new tool will create more work, as it is adding operations to each transaction on top of the task and methods they want to continue using.

Our part of the organization is currently using an older PRP-system software that was meant to handle all production resources when introduced in 2006. Team B have only partially taken use of this system, instead they have "crafted their way around" the system using post-its, mail and over the counter-interaction with the customers. They have been allowed to do so by the managements throughout the years. Team A has to a much larger degree used this old system and other digital routines.

We would argue that this points in the direction of fixed/zero-sum digital mindset (Solberg/Traavik/Wong, 2020) within the team B crew. They see themselves as service-minded, but they fear that the new digital workflow will move focus away from good customer support and towards system handling. They accept that the system is coming (whether they like it or not), but the benefits do not outweigh the disadvantages in their opinion. Quite contrary – the new system will make it more difficult for them to deliver adequately.

They do not, as opposed to their colleagues in Team A, think that they themselves can form new routines and workflows. They are concerned that the customers "won't approve", and it doesn't sit well with them to suggest that the customers also must change to make the system work. "This kind of change must come from the top management" (Male 54, Team B, Questionnaire). This leads to avoidance (Solberg et al., 2020) of the new tool where they minimize its significance and carry on with their current workflow of manual operations.

There are differences in how the teams relate to their customers, and how the customers interact with the teams. Team A work more closely with the creative parts of the organization. Their customers come from the content units in our company. Team A are more exposed to the dynamic workflow in a creative team and they adjust to this accordingly. Team B handles a larger warehouse with broader selection of equipment and a broader customer base, so this team are more distant to the creative energy. They are perceived as a supplier unit, whereas team A are expected to collaborate more with the customer. It could be perceived that team A has job crafted more than team B (Wrzesniewski et al. 2010).

Both teams are occupied with operational day-to-day tasks. The warehouses deliver up to 8-900 different projects during a year, so their goal has been to deliver the right equipment fast and efficient. There has been little room for innovation or risk taking.

We will argue that both teams in this unit find themselves in the hamster wheel end of the exploration-exploitation term (O`ReillyIII et al. 2011). By this, we suggest that both workflow, measurement, goals, and leadership is constructed to exploit the existing resources in a conservative fashion. They lack the

innovative force amongst themselves – when the new tool is launched, they need strong and sufficient external support from outside of the group to handle the change and find new ways. The leadership for these units has been solidly planted on the operational side (as seen in adaptability framework by Uhl-Bien, M., The Leadership Quarterly 2018). This framework theory argues that one needs to create an *adaptive space* to catalyze innovation and connect the exploring and exploiting part of an organization. This is not the case for the warehouse teams. Even though Team A work closer to innovative content units, they too have few connections with the entrepreneurial activity or innovation. The management has not facilitated the adaptive spaces, the network nor the roles that could foster new ways of (Uhl-Bien, M., The Leadership Quarterly 2018). The warehouse management doesn't expect their staff to initiate creativity, development, and innovation, and they are not measured by it.

This new tool has been pushed top-down in the organization. When we look at the 4 I's-model (Crossan et al., 1999) we can say that the warehouse teams have met the system in level 3 – the integration level – of the organizational framework. The warehouse teams are asked to accept the system and the purpose of it and handle the up- and downsides without much possibility to influence the process. "The timing of the rollout was not good, the project group did not listen to recommendations and were more concerned and eager to start the rollout" (Male 54, Team B, Questionnaire) .

To succeed they depend on a proper involvement and a good information flow about what to expect. This has not been good enough, according to the system manager (Male 39, Questionnaire):

"(...) the communication from the management in Production department down to the users has not been as good as it should be. This has then led to the users not understanding or hearing that they are expected to use this system (...) Instead of it being their own management that has set expectations (...) it has been us in the project who have become the ones who have set the expectations, and thus become the target for everyone who is frustrated with new routines. Here, there should have been clearer communication in advance about what it means to have a new booking system for equipment, and who is responsible for this in the organization."

Both teams also point to the need for more resources in the integration faze. Here from the staff manager (female 64, Questionnaire):

"Therefore, we had to ask for extra staff. The other jobs did not disappear. The PRP-system became an extra burden. When extra staffing at the warehouse came into place, this became a good solution and a clear model for further introduction runs".

The warehouse teams have met several of the challenges of moving across the levels (as described by Crossan et al., 1999). They started out with a lack of resources, but the rollout process got back on track when they were given extra staff. The communication and information flow has been weak, and it has not been clear for them what the system shall achieve, why we need it, who is responsible for the rollout and what is expected from each team. Especially team B have shown a low open-mindedness towards the system (Crossan et al. 1999).

It is also interesting to see this process in the light of the theories about the learning organization. When we consider the three building blocks of such institutions (Garvin et al., 2008) we can conclude that these warehouse units do not meet the standards on each element of the theory.

Block 1 (Garvin et al., 2008) says that a supportive learning environment is based upon psychological safety. It is difficult to conclude that the team member *doesn't* feel safe at work, but on the other hand; there are no tradition of thinking out of the box, sharing ideas, thinking that their opinion matter, etc. The discussion around new ideas and their appreciation of differences is also hard to spot. The two teams differ somewhat here, but they are both a quite homogenic group that work within an established culture. We know that the planned time and space for reflection has been next to none.

Block 2 (Garvin et al., 2008) describes concrete learning processes and practices, and here we have a long way to go with these teams. They are not experimenting teams, and seldom take the time to analyze and discuss. They do not have an eye and ear to the outside market, at least not when it comes to the best-practice workflows and customer relations. They are good and supportive

when it comes to welcoming new colleagues, but seldom uses this muscle because there are few new hires. They differ a bit when it comes to sharing information — Team A are active on the company's internal info platform, Team B seem completely off the grid.

Much of this culture comes from years of a certain leadership style, that has focused merely on operations. The leaders on this unit, including the department management, have not provided time, space or resources to facilitate learning here (as Block 3 (Garvin et al., 2008) suggest). We have measured these units and their leadership on other parameters – efficiency, satisfaction amongst the staff and how well we exploit our resources. To what Uhl-Bien (2018) calls the operational leadership. We have not lifted the importance of ideating, innovation and that every member could shape and influence their own workday, as we see both in the 4I's (Crossan et al. 1999), and job crafting (Wrzesniewski et al. 2010).

Theory/solutions

The two teams have the same resources and the same job demand but slightly different customer base. Team A has taken the opportunity of job design when they changed their warehouse location. The facilities are closely bound to how they manage their rentals, and they have established new routines. Team B has been in the same location for many years and thus kept the same methods of operation.

As quoted in Insendi materials 8.3, Tims et al. (2012) define job crafting as "the changes that employees may make to balance their job demands and job resources with their personal abilities and needs" (Tims et al. 2012 p. 174). The PRP-tool with rentals module is a more practical tool but it increases job demand due to the registration functionality which demands more keystrokes and more navigation than before.

The use of different job crafting exercises can prove successful for Team B, especially the one referred to in Indendi section 8.5: Wrzesniewski, A., Berg, J.M., & Dutton, J.E. (2010) show some very relatable examples of how to "assess and then alter one or more core aspects of work". It could be fruitful to let Team A and B do the group level job exercise together since they provide the same service only with different location and stock. This could provide a best practice of the two and help Team B reflect on the core matter of their perceived job demand. Is ICT the problem or is it their workflow?

On the other hand, throwing the job crafting exercise upon these team members can be risky. It needs to be carefully introduced and firmly facilitated. We must focus on their autonomy and help them to suggest actual positive change for themselves, that also answers the organizations strategy. If done properly, the two teams get the time and space to reflect on their own situation, they work together in finding solutions, and they feel safe throughout the process. Our biggest concern would be that especially Team B reinforces the perception that they must do things like they did before.

We need to acknowledge the fact that both units lack the training and experience of "thinking out of the box". On a long term, it will be necessary to

introduce this part of the organization to the exploration-end (O`Reilly III et al. 2011). The warehouse logistic field is changing rapidly, with new technology, automation, more demands on space efficiency and green thinking. The introduction of a new digital tool is merely the beginning a wave of change, in a field that has moved little when it comes to technology (in our organization at least).

To achieve this for the warehouse teams, we will need to create adaptive spaces and a safe environment that is training the innovative muscle, as described by Uhl-Bien & Arena, 2018. The MIT Sloan article "How to catalyze innovation in your organization" (Uhl-Bien&Arena, 2017) covers the idea of creating "adaptive spaces" for innovation. They define the adaptive space as "the network and organizational context that allow people, ideas, information and resources to flow across the organization and spur successful emergent innovation" (Uhl-Bien&Arena, 2017, p.40). This theory and idea are meant for cultivating innovation processes.

We have already established an enabling leadership role in our department management group. This role is responsible of development and innovation in our department and will be correlating with the current operational leadership and entrepreneurial units in our organization. Uhl-Bien and Arena (2017) presents three key roles to support the adaptive space to thrive – Brokers, Connectors and Energizers. We must define the exploration network and investigate which roles we find within the unit and which we can find elsewhere in our organization.

Our warehouses have a clear purpose and high job demand. New ways of handling equipment and redefining their inventory along with the use of the new PRP rentals module could help the "journey" of the customer experience. This adaptive space theory (Uhl-Bien&Arena, 2017) could be used on top of a job crafting process.

Peter Senge and the Fifth discipline as described in 6.4 on Insendi gives a good introduction to key characteristics of the learning organization but does not provide a solution to the issue in focus.

The 3 building blocks of the learning organization (Garvin et al. 2008) seem more concrete and useful. In our analysis we have concluded that these

building blocks are essential to deal with if the teams shall succeed and create a sense of ownership to the process. We believe we must begin with creating a supportive learning environment. The sharing of the knowledge acquired is essential. Dialogue and debate in safe environments encourage employees to learn. The leadership that actively questions and listens to employees reinforce and develop the learning organization. We will define this in our action plan.

Crossan et al. (1999) presents the four sub-processes of the organizational learning framework - intuition, interpreting, integration and institutionalizing. We believe that the way the warehouse teams see the launch of the new tool, is strongly affected by the lack of involvement, feed forward and feedback as the project has moved between the four process levels. When we search for solutions in this theory, it is useful to look to the proposition formed by the four key premises as shown in the article. Premise 1: Organizational learning involves a tension between assimilating new learning (exploration) and using what has been learned (exploitation). Premise 2: Organizational learning is multi-level: individual, group and organization. Premise 3: The three levels of organizational learning are linked by social and psychological processes: (4I's). Premise 4: Cognition affects action (and vice versa) (Crossan et al. 1999, p.523).

This is a very interesting theory to apply to the warehouse. At first, one might think that this is too advanced for such a simple matter, but it really touches the core of the status quo. Previous and present management have not considered the complexity of the workflow and the importance of bringing organizational learning to all levels of operations. By not involving this part of the organization they have been left "home alone". Our action plan comes in at a stage in the PRP project where we can see the weakness of the launch process pointed out by this theory, but we cannot fully compensate for this in retrospect.

Finally, we look to Vera & Crossan (2004) and the transformational and transactional leadership theory. Going deeper into the 4I's the Vera & Crossan (2004) article the figure 1 on p.225 show point G (group learning stock) which we can relate to our issue identified. We need to develop a shared understanding which can be gained through a combined leadership style: "At certain times organizational learning thrives under transactional leadership and at other times

they benefit from more transformational leadership" (Vera & Crossan, 2004, p.226).

In the article they differ between times of change and more stable times. A stable factor in our company is that we are under constant change. The rate of change is also increasing. The market we operate in has gone from local to global. In the article by Vera & Crossan (2004) they define transformational and transactional leadership as relations-oriented versus task-oriented. This combination is needed for the development for our teams. The tension between the setting of goals and clear expectations in the transactional to the inspirational and individually considerate in the transformational will help the management to ease the transition and further implementation of the new PRP system and to have a more united team A and team B.

Action plan

Job crafting

We will start by doing the Job Crafting Exercise (Wrzesniewski et al., 2010) with both teams and their manager together. We will assess internal facilitators for this process and frame the crafting process in alignment with our internal department ambitions and the company's strategic vision. We experience that our employees find both of these guidelines useful, that they identify with the strategy and believe in them. This can help the crafting process by making the team members more self-confident and autonomous, while also securing the best solutions for the rest of the department and the whole organization.

Meeting/workshops to strengthen relations between team and management

We observe that some of the team members have a low self-esteem when it comes to altering their tasks and workflows. To create a safe environment for the job-crafting exercise, it's crucial to uncover and recognize the staff's needs (Garvin et al. 2008). The two teams are very operational and react differently to change, but they have expressed their concerns for job demands. We will "start over" by reassuring them that their situation is not unique. We will facilitate an evaluation of the situation and make sure they feel listened to, and that their arguments are acknowledged. We need to establish a feeling of psychological safety (Building block 1, Garvin et al. 2008). If they can communicate and collaborate better, it will make them more secure, and it will hopefully influence their mindset.

Through workshops and team meetings we need to make them aware of their own role and capability to influence the outcome of the situation. They need more confidence and will achieve this when the management supports them. The management believes that the staff knows the needs of the customers already, but by making them engage more in their own role and understanding it, they can help optimize the warehouse workflow. A sufficient service level and a structured workflow is needed to be able to use the new tools as well. We must include them in the company's shared vision but broken down it to concrete events and activities on their level. This will give them a backing for delivering the correct service level and give them confidence in their actions.

Action 3: Enabling leadership role

A crucial part of our action plan will be to involve the warehouse units in the ongoing innovation and development process in our department. It is obvious that the warehouse teams need supportive leadership and a clear vision to change their views and workflows. By specifying the importance of the *enabling leadership role* (Uhl-Bien, 2018), that facilitates the adaptive space and roles within this space, we have been given a concrete and fresh leader-role to build. This new insight will also be useful when we investigate the balance between the two leadership styles described by Vera & Crossan, 2004. It will be interesting to see what happens when we expose these units to more transformational leadership.

The two teams need to coordinate their efforts and adapt a best practice for rentals. This will enable team learning and even create a more united team feeling. If they share the same challenges by approaching the problem in the same way, they can collaborate on the solution. Also, a new model for feed forward and feedback (Crossan et al. 1999), will reinforce continued development of these practices.

By doing these activities we hope to create an organization that reinforces learning. This is at the end-user (lowest level) of the organization and will be tied together with the main strategies from the top but adapted to this level.

Reference list:

Arena, M., Cross, R., Sims, J., & Uhl-Bien, M. (2017). How to catalyze innovation in your organization. MIT Sloan Management Review, 58(4), 38-48

Crossan, M. M., Lane, H. W., & White, R. E. (1999). An organizational learning framework: From intuition to institution. Academy of management review, 24(3), 522-537.

Garvin, D. A., Edmondson, A. C., & Gino, F. (2008). Is yours a learning organization?. Harvard business review, 86(3), 109.

O'Reilly III, C. A., & Tushman, M. L. (2011). Organizational ambidexterity in action: How managers explore and exploit. California Management Review, 53(4), 5-22.

Solberg, E., Traavik, L. E., & Wong, S. I. (2020). Digital mindsets: Recognizing and leveraging individual beliefs for digital transformation. California Management Review, 62(4), 105-124

Uhl-Bien, M., & Arena, M. (2018). Leadership for organizational adaptability: A theoretical synthesis and integrative framework. The Leadership Quarterly, 29(1), 89-104.

Vera, D., & Crossan, M. (2004). Strategic leadership and organizational learning. Academy of management review, 29(2), 222-240.

Wrzesniewski, A., Berg, J. M., & Dutton, J. E. (2010). Turn the job you have into the job you want. Harvard Business Review, 88(6), 114-117.

Zhang, F., & Parker, S. K. (2019). Reorienting job crafting research: A hierarchical structure of job crafting concepts and integrative review. Journal of Organizational Behavior, 40(2), 126-146.

Isendi 6.4

https://bi.insendi.com/programmes/XO9dWSm0o/courses/GZUH0ztKGB/weeks/ayrEZTMDZx/screens/urIX6TqYJz

Insendi 8.3

https://bi.insendi.com/programmes/XO9dWSm0o/courses/GZUH0ztKGB/weeks/PYPen9WHg/screens/EzWf65rAjX (Tims, M., Bakker, A. B., & Derks, D.

(2012). Development and validation of the job crafting scale. Journal of vocational behavior, 80(1), 173-186.)

Insendi 8.5

 $\underline{https://bi.insendi.com/programmes/XO9dWSm0o/courses/GZUH0ztKGB/weeks}\\ / \underline{PYPen9WHg/screens/Ln6N54flO}$

Attachment: Generell informasjon PRP

Bakgrunn og målsetting for PRP:

funnet, hverandre og seg selv bedre nysgjerrig Norge

diemangfold

ner, velger og elsker til for alle

av norsk og samisk virkelighet

ny forståelse og opplevelser som setter spor

old og organisasjon orsker nye ideer

innhold, teknologi og produktutvikling publisering og innhold Standardisere og forenkle arbeidsflyt og rutiner

Digitalisere og automatisere oppgaver og redusere dobbeltarbeid

Konsolidere og forbedre ITsystemene brukt i arbeidsflyten

> Legge til rette for bedre styringsinformasjon og informasjonsdeling

Vi skal være i front på planlegging og organisering av alle produksjoner slik at publikum alltid får det beste innholdet

Vi skal ha **ett, åpent og helhetlig system** som brukes av alle Vi skal jobbe **effektivt, likt og smart** i hele organisasjonen Oppdatert **informasjon skal være tilgjengelig** for den som trenger det til enhver tid

(%)

Ouestionnaire

Answer from Male (39), System manager:

What has gone well?

All in all, it has gone well. In the beginning, it has been a lot of new for the users, but we see that the number of inquiries decreases sharply after the users have used the system for a while. Thinking that it is natural in that it is a complex system, and even though many have received training in the system, it is a completely different thing to use it in real situations.

I think the rollout at the A warehouse has gone incredibly well. From the very beginning, they have been concerned with registering equipment and have taken proper ownership of their own data. This has meant that they have not needed as much follow-up as other teams.

What has not worked?

Here may be a small torch, but the communication from the management in production down to the users has not been as good as it should be. This has then led to the users not understanding or hearing that they are expected to use this system, because they are employed by NRK. Instead of it being their own management that has set expectations that this is a system that the employees will use, it has been us in the project who have become the ones who have set the expectations, and thus become the target for everyone who is frustrated with new routines. Here, there should have been clearer communication in advance about what it means to have a new booking system for equipment, and who is responsible for this in the organization.

It has also been challenging to get enough people to register equipment, especially since their daily work takes almost all the time. Some warehouses have been good at hiring on-call substitutes, and here it has worked better.

It has also been a bit challenging to get the line to understand that it is they who own the data in the system, and thus it is they who have to enter the equipment, and not the PRP project. Now I have done a good deal of registering equipment

while I was employed in production, so it may be that everyone thought I was fixing everything.

What were the biggest obstacles?

The absolute biggest obstacle has been to bring about cultural change. The employees have been used to not having to check out equipment, only book it in MediaPulse or some Excel sheet. Very many have not been receptive to having to do any extra work to get equipment taken out, and some do not see the value of scanning out - and checking in. Some others, on the other hand, have been very positive about gaining more control, and think it is good with a new system and new routines.

Another major obstacle has been that equipment rental in NRK largely ends up with the individual employee. We have very few employees in the warehouses in relation to the amount of equipment we have and the complexity we have in production. In NRK you can almost say that everyone has a small position in the warehouse. Thus, it is expected that very many employees use the system and have to learn it in some way. This has not always been easy because it is a complex system and because users have not understood the new concepts in the software. We have created some e-learning in the form of videos and text, but it does not seem that users bother to take the time to see these before they go to the warehouse for the first time, even though they have received information about it. Many people expect things to be like in the old system (MediaPulse, Road) and demand functionality from there. They then want to put the old system into the new instead of seeing what the new system can offer and where the limitations lie.

What expectations did you have in advance and how is it now that it has been introduced?

I had high expectations that we would have better control of our equipment, and get more data and history about use and service. I think we have got this. I had probably hoped that things would go a little smoother and that we had not had to get so involved in the organization internally in the production department and the technology department. We have come across a surprising number of things that have not been completely in place in the organization (this also applies to NRK as

a whole), and for NRK it is probably healthy to bring in such a project to clean things up.

I had probably hoped that the employees would be a little more open to change than they have been.

Answer from female (64), Staff Manager

Could you describe a bit about your experience?

· My experience in brief is that anchoring in the employees who get their workday and workflow changed - when such a comprehensive change is made - is absolutely crucial for the introduction and operation of a new system for ordering, withdrawal and check-in etc. to work. In the warehouse there was thorough information and training with start-up fairly immediately after this. Including follow-up and refresher days. But it requires more work for employees here than before. Everything must first be marked, scanned, entered into the system, etc. Because the warehouse and equipment handling were first out (EFP, Light, Sound, OB warehouse), there were many start-up errors in the setup and functionalities in Vimbiz. Both patience and knowledge were put at stake, along with capacity. Therefore, we had to ask for extra staff. The other jobs did not disappear. Vimbiz became an extra burden. When extra staffing at the EFP warehouse came into place, this became a good solution and a clear model for further introduction runs.

What has gone well?

What has gone well is training and deployment among the warehouse people. As described above, information, anchoring, understanding and training are related. Furthermore, we quickly got extra capacity in place when it turned out to be crucial. Here I mean (unassumingly) that both my role as HR manager and Erik's role as my manager acted quickly and efficiently towards the Vimbiz project and also made visible the costs and needs we needed. Probably also things I was not involved in but outwardly it was good, and the people in the warehouse understood that they were heard. Important

What has not worked? What were the biggest obstacles?

What has not worked, and which has been / are obstacles, is the cooperation and knowledge of the other professionals who are dependent on the systems in the warehouses working. At the same time, it took 8 months from photographers and technical managers, among others, had their courses until they actually started using Vimbiz in practice. Completely hollow as some say. Everyone who conducts competence development and training knows from painful processes from the past that it does not work.

Thus a lot of noise, more patience, and more work on the warehouse people. Like marking equipment (which has been out on large productions or long-term projects) dispatching, packing, conducting training and running from scanner to scanner and screen to screen to get equipment out on time.

The obstacles have been great work pressure and poor choice of time for the introduction. The Vimbiz project has been isolated from reality and planned a rollout and process where their rollout became most important. Not users'. We pay dearly for that now.

What expectations did you have in advance and how is it now that it has been introduced?

I had - and I have - expectations related to having a total (best possible) overview of the use of equipment, faults in equipment, and not least logistics on who has what that different and similar. The fact that unmarked equipment also appears (from various newsrooms, drawers and cabinets) is a gain in terms of being able to utilize / use all equipment better. Not all local 'owners' like it, but getting it registered and posted in Vimbiz is an advantage for everyone, so the individual can rent for longer periods. And it is clear that we can also cut orders, wishes, etc. for what kind of equipment is used the most is good. What we should acquire, what we should NOT spend money on. It is exciting to be able to take out various reports from Vimbiz that can show what we are wondering about. Facts.

I am optimistic and positive about Vimbiz, but sticking my finger in the ground, having contact with reality is crucial for further success. And Vimbiz is not the answer to everything. For example, props, costumes, make-up, etc. that the program departments order and need. This must be shown in other ways in the orders and execution than with equipment.

Answer from male (64), warehouse manager Team A:

Experience:

- -It takes a long time to implement all the equipment in a user-friendly way.
- Labeling, making understandable kits and what they should contain.
- -Requires more staff in the warehouses.
- -A lot of time is spent maintaining the database. There are both user errors and errors in VimBiz that take a lot of time.
 - -Easier than Mediapulse to book equipment for productions.
- -We also spend a lot of time helping users at check-in / check-out.
- -People who use VB a lot, learn it better and now there are significantly more who manage almost on their own.
- -Much better control of what NRK owns of equipment.
- -Better control of where equipment is at all times, but it requires users to check equipment in and out of VB. It does not help if they just go into the warehouses and take out equipment without doing it in VB.
- -The service module means that we get a good follow-up of equipment for service and history.

What has gone well:

Marking of all equipment. It has taken a lot of time and resources, but has worked well by and large. We have gained better control and overview of the equipment.

-Training of our own super users last autumn at Ensjø worked well. By then, most of the settings and equipment were in place. It was then easier to have something concrete to work with.

What has not worked:

- -The first part of the training of the superusers (eg me) was difficult to follow. I struggled to understand the training and there was far too much we did not need to learn. I eventually dropped out and bet that the next course would be more convenient for us.
- -Training of the users has not worked well and this may be due to the fact that most have not familiarized themselves with the training videos in advance.
- -Until the last time, there has been trouble logging in to VB for the users. Now it seems that 2 factor login is not required and that is good.

What were the biggest obstacles:

- -Make users understand the seriousness of using VB.
- -The management must understand how the use VB generates more work for us who run it. It requires better staffing. For how long is not easy to say, but I do not see any other solution as it looks now. We are also vulnerable to illness, so being the right number of people is important to have control and that VB works as intended.

Expectations:

-I had high expectations that VB would solve a lot for us who are responsible for production equipment. Both logistics, booking, control of where it is at all times and what kind of equipment we are in possession of.

VB introduced:

- -Generally positive about how it works, but it is a program that requires a lot of us who run it. A lot of "button presses" and it could have been more intuitive to use.
- -Good overview of what equipment we have
- -Better control of where equipment is at all times
- -Easier than Mediapulse to book equipment for productions, but it can be even easier. I think it gets better when the projects and personnel are also involved.

Answer from Male (49), Team B (New member)

Could you describe a bit about your experience?

I started with Vimbiz in February 2022 when I started as responsible for the Sound and OB warehouse. The project was already underway at this and two other warehouses (Lyslageret and EFP-lageret) from the autumn of 2021. It has been a steep curve when I had to learn both the Vimbiz program, and what and where the equipment is in the warehouse.

Now I start to get a good overview of the program. There are still many presses and pages you have to visit, but the error messages are becoming fewer and fewer. Wants a regular follow-up from the Vimbiz project on further training and info on new updates in the program. The system is designed for manned warehouses, but in NRK it will be used by employees in production. It flows easier now when more people have used it over time and gained more experience.

What has gone well?

It has generally gone very well at Lydlageret. The users from Lydgruppa have been used to controlling themselves and they have quickly settled into Vimbiz. They have good experience of updating each other on the equipment front, and it is also this group I have spent the most time with.

At the OB warehouse, there is a different approach. There are many more users who have different training and there are several people with at check-in / check-in. Sees that it goes much easier when several have used it for some time.

What has not worked?

What was first considered a "user error" was simply a system error. Vimbiz is a very flexible system that can be set up / used with different settings. NRK wants its own settings that are adapted to our routines and production method, and people in Vimbiz must program specifically. This has not gone smoothly as they do not necessarily make the changes / adjustments we want. There is a cost in what has also placed a limit on what can be complied with by wishes.

It should also be said that the system is "heavy" in terms of use. There are many keystrokes. Many different "pictures" you have to use to make changes in orders, see plan picture, change inventory, etc. This means that you easily do not get what you want because you are in the "wrong picture". Which in turn creates frustration that the system is not working.

With all due respect to the Vimbiz project group, but it does not hold that you are on a course in September and will use the system in full only in February / March. Then a lot is forgotten and it is not enough with some videos online with guidance. There are too many employees who have received too little training.

What were the biggest obstacles?

I think the biggest challenge is to get Vimbiz to work against the routines that have worked in NRK from before. Some routines have had to be changed and it has not gone unnoticed. It has hardly been staffed at the OB warehouse before and there has been limited training for employees. When the system is also rolled out in the winter season where there is a lot of logistics in terms of equipment in and out, it creates a lot of frustration. What has been important is that there have been some "super users" who can assist when checking equipment in and out of the warehouse / system. Also follow up those who work in the warehouses and who are responsible for daily operations.

What expectations did you have in advance and how is it now that it has been introduced?

I had no experience or knowledge of the system in advance when I started working in February and had a two-day course / introduction (days two and three after I started at NRK)

My experience now is that there is a better overview of what equipment is in stock, what is taken out on the various productions and what is in service. Now there are more employees who use the system for each week. It requires a continuous process of updating and "cleaning" in orders as there are still many new users.

Answer from Male (54) Team B:

The timing of the rollout was crisis. Date was set without asking. Team B tried to let the system managers know that this was "high-season" but felt they were talking to a wall. No one took their feedback into consideration.

This software will probably work optimally on a commercial rental house. Drama makes this a heavy and to difficult prog to use. Not adapted to the way we work. Too many clicks. Too many changes.

Gave notice that they needed help, got assistance from VB for 2 weeks and then things got going. Had to simplify the way you worked with VB. Many go out and check in.

Ties people up to the computer. When someone from VB was present, there was a separation for the warehouse. It was first then that their problems were understood and action taken to correct this.

It was very frustrating that they were not listened to at first. Both start-up and the use of prog. Simplifications have been made and a quiet period has made VB work better. Much more time spent on PC. Perceived as cumbersome.

Works for multi-camera.

Cannot be compared with other companies. No system on the users. No dates. Difficult to use VB when users do not deliver things on time.

The check out process; must do over when the customers change their mind, and this happens a lot.

VB was not ready when it was rolled out. The wishes / changes cost money. The most important changes they have implemented, but it can take a very long time.

It goes faster every day, you learn more every day. 61 productions out at the same time.

New and better: a reminder is sent to customer immediately. Saves a lot of work for the guys in the warehouse.

The PRP system prevents us from doing the job.

Experiences that you they are now taken seriously.

Had 2 younger people inside who are "young, awake and smart" who also could confirm that this system was difficult to use. .

Expectations: had faith that it would be easier. Thought it was ready to use (out of the box), something it was not.