

METALWORKING COMPANY*: BUILDING A DYNAMIC ORGANISATION

Knowledge Dimension: Human Resource Management & Organisation

Basic Teaching Case 08 2018

*Fictional company name

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Being "dynamic" is of utmost importance in order to survive in a fast moving and competitive environment. In the customer industry that Metalworking Company¹ serves, being deemed as conservative and traditional, one might expect firms to lack the necessary dynamism and innovative capabilities. Moreover, the company was aware that not only new processing materials, but also rival firms in the industry constitute threats to its long term competitiveness. Although the firm actually is already dynamic, especially with regard to its production processes, the two managing directors of the production site in Austria asked themselves the following questions: How can Metalworking Company successfully adapt to the challenges of technological change in the future? And how can Metalworking Company develop itself into the direction of a "dynamic" company? Precisely, the goal at Metalworking Company is to acquire the capability to manage technological change and to thereof deduce necessary change processes. These change processes should, subsequently, be integrated into the firm as new standards.

Metalworking Company - Background note

The family company Metalworking Company Group was founded around 150 years ago and has its headquarters in Germany. It is one of the most important metal working companies for the professional processing of different materials. Its customers primarily include industrial enterprises and handicraft businesses. The international production site in Austria was opened in the mid-20th century and has continuously been expanded since then. The production site in Austria is now, together with the headquarters in Germany, Metalworking Company's largest production and sales branch.

In 2018, the plant in Austria counts around 500 employees and closely cooperates other production sites and service stations across Austria. The workforce in Austria mainly comes from the surrounding region and consists of numerous long-serving employees and workers. Additionally, Metalworking Company places a great emphasis on apprenticeship training and is an important apprentice trainer in the region. The plant is managed by a technical manager and a commercial manager: the departments for construction, purchase, procurement and logistics, process engineering and production report to the former, whereas the departments for finance, human resources, R&D, application engineering, sales and marketing report to the latter.

Metalworking Company's primary customer industry is generally considered a conservative and traditional area to operate in. Rigidities and limited innovations within this sector are the result

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¹ If not otherwise specified, "Metalworking Company" refers to the production site in Austria, not the Metalworking Company Group.





thereof. Although the metal processing company is aware of the importance of being up to date in terms of technological changes and has made increasing efforts over the last years by extensively investing in R&D, encouraging a sound knowledge management and intensifying its cooperation with customers, it feels that is not dynamic enough to adequately react to them.

Dynamics at Metalworking Company

Metalworking Company generally is a dynamic firm. But, as almost anywhere else, there is room for improvement. Metalworking Company is the international market- and technology-leader in their operating industry, excels in running highly innovative manufacturing processes and has a firm size that allows it to react quicker than other competitors. Still, the firm struggles to outbreak from firmly fixed thought patterns and the conservativeness that is imposed by the traditional customer industry. Despite its lean production approach, Metalworking Company itself sees some inefficiencies with regard to product and process innovations which, in turn, might restrain its ability to dynamically adapt to changing environments and conditions. But let's take a closer look at the situation...

Leadership and communication

Until 2010, Metalworking Company's production site in Austria was paternalistically managed by the former CEO. He knew every employee of the company and was very present in the production and other departments of the firm. He led the firm to the best of his knowledge and belief through a hierarchical approach. In 2010, the management board of Metalworking Company underwent a transition and is now led by two men of whom one is responsible for the commercial management and the other for the technical management of Metalworking Company. Both try to practice a more participative leadership approach. They use quarterly information events to inform employees about current news, sales figures, revenues and investments. However, there is criticism from the employees' side, claiming that information regarding major changes is often communicated too late and that there is too little transparency regarding decision processes. Employees consequently feel that they are not enough integrated into change processes - mostly in a top-down manner - and leave employees confronted with fait accompli.

Production

In order to set up a structured production process and avoid "lumping everything together", a line production was introduced in 2005. Today, a dedicated team is responsible for each production





line, which should increase employee's flexibility as every worker now has to be aware and know the up- and downstream processes within the production. In departments other than the production, flexibility is additionally ensured by process-oriented team constellations that allow, for example, an application engineer to temporarily support the sales team. The results of the introduction of line production is visible: higher productivity and a reduction in throughput time are the most important benefits.

However, there also was some resistance regarding the introduction of the line production. One argument that caused uncertainty amongst employees was that line production is appropriate for serial production, but not for batch size one - as it is the case for most of Metalworking Company's products. Additionally, some employees feared to lose their work because, through the implementation of line production, the amount of half-finished products was almost halved, leading to the impression that there were less orders than before. Although the implementation followed lean manufacturing principles, the work counsellor noted that through the line production we are "blocking ourselves". Concretely, this means that while some production lines are overloaded, others are underutilised. However, the actual problem lies in the fact that workers from underutilised production lines cannot switch to overloaded lines because of the highly specific machines used in each line. While, on the one hand, this means that employees cannot unfold the full potential of their specific capabilities as they always work at the same machines, operating the full range of machines, on the other hand, would require specific training and knowhow. Furthermore, rigidities in work processes are caused not only by the line production itself, but also by three-shift operations which are not welcomed by most of the employees. The resentment towards shift work, although not a problem unique to Metalworking Company, is especially strong amongst young employees. This, in turn, leads to a lack of skilled workers who are willing to assume third shifts. The lack of skilled staff, however, also gets visible in departments other than the production - working overtime and on weekends is little attractive and results in departures which, in turn, aggravate the problem of lacking highly-skilled people. Although Metalworking Company's goal is to reduce night shifts to a minimum and to entirely abandoning them in the future with the help of specialised machines, the HR manager criticises that there is still too little reflection on how to remove the night shift - also acknowledging the fact that doing so represents a great financial strain.

Innovation

In 2015, Metalworking Company has restructured and strengthened its R&D department by expanding it with employees from other departments (e.g. process optimization) who were working in the area of research and development. Before, research and development initiatives





were heavily driven and governed by the mother company. The new R&D team is described as young, dynamic and with a sound education - all of which allows the members of the R&D team to work interdisciplinary. For specific projects, the R&D team can additionally resort to employees from other departments to jointly work on certain tasks.

Innovation endeavours at Metalworking Company are heavily market-driven and, thus, application-specific. There is little basic research which, however, can be related to the industry and the processing materials which currently leave little room for technology-driven innovation. Still, at Metalworking Company, there are attempts to exploit new areas and segments in order to develop radically new products. In the past, when Metalworking Company did not yet have a strong R&D department, innovations were limited to product modifications. However, this can also be attributed to the fact that Metalworking Company is a subsidiary and, thus, is dependent on the decisions of the mother company in terms of radically new product innovations - according to the motto "in the end, the figures need to be right". Despite the dependence on the mother company which has an impeding effect on new product innovations, some managers at Metalworking Company also acknowledge that the low fluctuation and high job tenure in the company have led to operational blindness over the years. Consequently, innovative capabilities barely develop further and only few managers possess broad and generalist knowledge that could widen the focus for sensing and seizing emergent opportunities.

Amongst Metalworking Company's workforce, managers also note a lack of sufficient processoriented and interdisciplinary thinking which, as the Sales Manager acknowledges, might be "a
result of the patriarchal leadership style in the last decades". Other division managers are very
satisfied with their employee's level of process-related knowledge. Primarily, this can be ascribed
to the broad offer of trainings for new employees and the emphasis on interdisciplinary work
procedures at Metalworking Company. The different departments at Metalworking Company are
strongly interconnected and the generally long job tenure of Metalworking Company employees
enables them to know the firm and its specificities inside out. And yet other managers struggle to
keep their employees motivated and criticise their lack of entrepreneurial thinking. They argue
that this, however, might be a result of the employees' tendency to work to rule, thereby
neglecting alternative approaches and "thinking outside the box".

Product innovation

Product innovations at Metalworking Company are usually market-driven, meaning that ideas for product modifications or new product innovations come directly from the customers. The most important impetus for new product innovations, however, is given by a big biannual fair in Europe. Although this deadline to deliver new product innovations every two years is self-imposed and





reasonable for Metalworking Company, it has barely been put into question whether this rhythm actually impedes larger and more radical product innovations which might take longer than two years.²

An extended development circle, composing of division managers and the top management at Metalworking Company, regularly discusses product innovations at three-week intervals. Also external innovations, current issues and problems with ongoing innovations and customer complaints are thereby discussed. The extended development circle, therefore, is the most important platform for discussing new product innovations and represents the core for decisionmaking in this respect. Other employees have the opportunity to bring in new ideas within the frame of an idea circle that meets every three to four weeks, but usually do not participate in the meetings of the development circle and consequently are excluded from the decision-making processes on whether or not to implement a new idea. This, in turn, leads to discouragement amongst the employees when it comes to engaging themselves in the development of new product innovations. The current approach for idea management is therefore regarded as obsolete and would need a new makeover. Although Metalworking Company is aware of the malfunctions inherent in the idea management, they lack ideas on how to improve the situation. Also with regard to the development circle, some participating managers criticise that the information exchange is often redundant and should be organised more tightly - meetings every six to eight weeks would be enough, given that usually there are no bigger progresses with regard to the R&D and production processes within the three week rhythm.

The process for new product development and modifications is standardised and includes the following phases: (1) initiation, (2) planning, (3) implementation and (4) finalisation. Precisely, the initiation phase includes the evaluation of the needs coming from the market and the customers as well as ideas from the idea management tool which are reconciled with the demands coming from the executive board, sales and procurement. The pre-project phase is documented in the knowledge database and a project proposal is developed. As soon as the project proposal is accepted, the planning phase begins. The first step thereby is to define a demand profile for the project that, if accepted, results in the project hand-over to the sales and R&D departments who then develop a project plan as well as a functional specifications document. When the functional specifications document is approved, the implementation phase starts by undergoing an iterative process of development work, customer tests as well as validation and verification. As soon as the development work is approved, one proceeds to the release of the pilot series. From then on, the process engineering, applications engineering and the production are additionally involved in the

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² The latest larger product innovation at Metalworking Company dates back to the year 2008.





technical implementation of the project and its transition into serial production. When the product is approved, the project is officially finished. Throughout the whole product development process, the project is documented and the project proposal, the functional specifications document and other documents are archived according to Metalworking Company's knowledge management principles.

Despite the leanly organised and standardised process for new product developments, Metalworking Company has still encountered some difficulties with regard to its production process. For example, Metalworking Company won a competition hosted by a university with the development of a new product a couple of years ago, but failed to adequately position it on the market. Division managers at Metalworking Company ascribe this failure to spoiled opportunities that occur through unnecessary mistakes in the production, the fact that nobody is responsible for a new product throughout the entire development process, the inability to efficiently reap the benefits of cooperation with innovation partners or the problem of making the same mistakes over and over, although documented in the knowledge database. To overcome these issues, division managers would welcome more investments in R&D and process management. This should not only diminish internal inefficiencies, but also reduce customer complaints and increase the speed of responsiveness - which is especially important with regard to batch size 1 production and the heavily customer-driven industry - in order to maintain a competitive advantage. However, batch size 1 production and the need to react quickly, in turn, results in the fact that new products are not completely mature when launched on the market.

Process innovation

Continuous improvement processes (CIP) for internal process improvements are the most commonly used form to trigger innovations in this area. Although bigger process innovations, such as the transition to line production explained above, usually only occur every ten years, ideas for CIP can be brought in by every employee at Metalworking Company. In biweekly CIP-meetings, to which everyone can participate, new ideas are discussed. In general, one observed a decline in ideas for CIP over the last years which, however, could also be a result of a well-working CIP at Metalworking Company. In general, although the production of new ideas is not itself rewarded, implemented CIP proposals are remunerated with an amount of about 150 euros. However, the decision whether a new idea regarding the optimisation of processes will be implemented or not is dependent on middle- and first-level managers. Employees therefore often feel that they do not get the chance to actively participate in decision-making processes which might be a further reason of why proposals for CIP have declined in the past years. Although not sanctioned if they do not contribute to the generation of CIPs, there is a goal regarding the amount of CIPs per employee. This means that the number of implemented and open CIPs is carefully documented





and reconciled with the according CIP yearly goals. These statistics exist for various departments, such as the production sites in Austria, sales or internal services.

Although process innovations take place in all departments of Metalworking Company, the focus clearly is on the production. As mentioned earlier, Metalworking Company has undertaken great efforts to make the transition towards line production following lean production principles. However, with large process innovations, such as the introduction of line production, the mother company again occupies a strong position.

Summing it up

Based on Metalworking Company's existing innovative capabilities and production processes - including their strengths as well as their restraints - the top management is now thinking of ways how to make the company as a whole more dynamic and adaptable, especially with regard to technological changes. Specifically, their main aim is to find adequate approaches in order to identify and resolve possible inefficiencies and problems that might hinder the tool manufacturer's capacity in becoming a truly dynamic organisation. The top management therefore want to make these problems visible, work out solutions and implement them in a sustainable manner so that they can be implemented as new standards at Metalworking Company.





Questions for discussion

- 1. The case suggests that the industry sector impacts the firm's approach towards innovation and dynamism. Elaborate how these two factors are related. Discuss the requirements concerning innovation and dynamism in different industries.
- 2. Although Metalworking Company perceives itself as dynamic company, they see room for improvement. Which good practices can you identify from the case? Which practices need further improvement? Where are blind spots that have not yet been identified as problematic by Metalworking Company?
- 3. Metalworking Company mentioned some issues that need improvement (e.g. production, product innovation, process innovation). Which explanations did Metalworking Company find for its issues? Which reasons do you see? Are there underlying issues that need to be addressed before working on these specific topics?
- 4. After having identified the areas for improvement, how would you deal with the issues regarding leadership & communication, innovation and production? How would you resolve underlying issues? Do you see more urgent development areas than mentioned in the case?
- 5. Which activities regarding Human Resource Management (e.g. recruitment, selection, HR development, compensation, career paths, deployment of personnel) could be undertaken to resolve Metalworking Company's issues?
- 6. Based on your analysis, develop a plan for dynamising Metalworking Company. Which issues should be addressed in which order? Who should be involved? How should they implement the changes?