

The Innovative Challenge of Human Resource Management

-- A Dynamic Environmental Perspective

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Abstract

In recent years, more and more organizations have found that they need more flexibility and innovation to deal with HR management issues in sudden and urgent dynamic environments, such as infectious disease outbreaks (such as COVID-19) forcing employees to work remotely at scale. Faced with the challenges posed by drastic changes in the environment to human resource management, businesses can respond effectively by using an informal structure known as a "skunk factory," in which flexible teams empowered to work quickly with minimal management constraints. In this article, we aim to better understand when and how organizations can use structures like "skunk factories" to help them meet the challenges of rapidly evolving HR. We will discuss Trinity Group's approach as an example of an organization using this approach. We expect the learning insights gained from this example to guide the "skunk factory" of human resource management in the future. Finally, we emphasize that, in addition to conventional, established ways of working, innovative organizational structures have both advantages and disadvantages in addressing HR challenges.

Keywords

Human Resource Management; COVID-19; Dynamic Environment.

1. Introduction

"Many organizations have redesigned processes related to routine support and service activities, but the larger challenge is often related to strategic (such as other unconventional) HR efforts, which in more agile organizations are often done by ad hoc (and sometimes virtual) teams made up of employees from various operating units and departments of excellence. HR professionals must therefore learn and apply that ability, like their peers, to foster and accelerate this type of spontaneous collaboration (Wright, Dyer, & Takla, 1999)."

As the environment continues to change, organizations increasingly need to remain competitive and keep up with the unprecedented pace of change in their environment, where a highly volatile, uncertain, complex, and ambiguous (VUCA) environment creates both opportunities and threats to businesses, requiring them to be innovative and creative in addressing these challenges, which are often not only unpredictable, but may even be unprecedented. Scholars describe how HR management can improve an organization's responsiveness in a rapidly changing external environment by aligning HR strategies and practices to shape employees' innovative behavior (e.g., Cappelli & Tavis, 2018); However, few people have noticed how organizations respond when disruptive changes involve human resources issues affecting their members. The COVID-19 pandemic is a stark example of how organizations need to make disruptive changes to their HR functions as they embark on travel bans and quarantines, massive workforce restructuring and layoffs, and a full shift toward work-from-home models through physical distancing (McCulloch, 2020). The crisis is by no means the only example of a demand for flexibility in HR resources. In the VUCA environment,

we believe that human resource management in many organizations can benefit from adopting a "skunk factory" structural approach, as we explain in detail below, a "skunk factory" can cultivate a more rapid and novel response to unconventional situations, complementing and expanding the ability to establish human resource structures and processes. The structures we understand about rapid response and innovation in the management literature focus on strategic product market demands rather than labor market or HR issues.

In the literature on the innovative design of organizations, it is studied how some large bureaucratic organizations deliberately created special units, commonly known as "skunk factories". These units are more flexible and are given autonomy for rapid innovation (Gwynne, 1997). In the literature on the innovative design of organizations, it is studied how some large bureaucratic organizations deliberately created special units, commonly known as "skunk factories". These units are more flexible and are given autonomy for rapid innovation (Gwynne, 1997). Neither organizational design scholars nor strategic HR scholars have explored the use of skunk engineering structures to deal with disruptive contingencies. But this research is necessary. First, today's businesses face more and more unexpected HR challenges that require drastic measures (Williams, Gruber, 2017) as they move forward in an increasingly interconnected world where fluctuations in one region can have a huge knock-on effect around the world. The outbreak of COVID-19 shows that businesses need to respond quickly to the rapidly evolving HR-related challenges (McCulloch, 2020). Since the type of scenario for which "skunk factories" fit is now more prevalent (Williams et al., 2017), we think more attention should be paid to this structure. Second, the strategic HR literature focuses on the development of formal HR systems and practices that are the primary structure for implementing routine organizational controls. We know very little about organizational structures such as the Skunk Factory, which are likely to respond more effectively to the increasingly frequent and unconventional emergency threats and opportunities faced in an organization's human resource management. Finally, many organizations today have a higher level of professional specialization and status than in the past few decades, which is conducive to increasing the recognition of the skunk team. Next, we take Sany Group as an example to describe the suitability of skunk factories in an HR context by showing how they can be autonomous in their organizations, overcome bureaucratic constraints, and provide unconventional solutions to specific HR situations that affect members of the organisation.

2. The Innovative Method of Skunk

The Skunk Factory method originated in 1943 at Lockheed Martin in California, when the aircraft company was asked to develop a prototype jet fighter for the U.S. Air Force within a tight 180-day deadline. The project carefully selected a group of designers who work secretly in a place separate from the company's main business. After the successful early completion of the jet fighter program, the Skunk Project approach was formalized in Lockheed's Advanced Development Program. In the decades since, many companies seeking innovation have adopted the "Skunk Factory" approach. The core feature of the "Skunk Factory" is to rely on self-driven teams working within a short time frame to achieve breakthrough innovations (Gwynne, 1997). The "Skunk Factory" model has traditionally been adopted by large corporations, which have chosen to form "Skunk Factories" to accelerate the effectiveness of their innovation processes. There is some evidence that has shown positive results in skunk work, including the novelty of creativity, efficiency, faster development, and improvement in the quality of design and production (Oliver & Cole, 2019). The Skunk Factory team is very effective at completing highly innovative and fast projects. But there are also critics who argue that the "Skunk Factory" is only a temporary solution (Blank, 2014). While skunk products may be warmly welcomed at first, if they do not continue to provide further success, or if their innovation process is not

shared more broadly in the organization, some will assume that their long-term benefits may be limited (Richardson, 2010). These concerns may be justified, although, to our knowledge, few published empirical studies have tested these claims. In fact, Larsson (2019) believes that adopting a "skunk factory" is the primary way to solve the challenges of a rapidly evolving (and possibly temporary) organization. In other words, when organizations need innovative and urgent solutions, a "skunk factory" approach can be deployed as needed to develop organizational capabilities. For example, Johnson & Johnson has launched a "Skunk Factory" approach with a team of 15 people to accelerate the development of a COVID-19 vaccine (S. Wood, 2020).

3. The Practice of Skunk Factories in Human Resources

3.1. Overview

In December 2019, the health department of Wuhan, Hubei Province, reported a case of pneumonia of unknown cause. Later, the resulting disease was named "Novel Coronavirus Disease 2019" (COVID-19) by the World Health Organization. The virus is highly contagious, and China's Spring Festival has further accelerated its spread. In order to contain the virus outbreak, on January 23, 2020, the Chinese government locked down Wuhan. A day later, the whole province of Hubei Province implemented a "lockdown", and other provinces and regions also followed suit, implementing a "lockdown" or "restriction of traffic". Soon, the COVID-19 pandemic spread to more countries outside of China, with many governments announcing lockdown or stay-at-home orders, enforcing physical distancing, restricting travel, banning mass gatherings, and closing schools and workplaces.

3.2. Human Resources Challenges: Unexpected Changes in Work Patterns and Health Risks for Employees

The outbreak of COVID-19 has had a serious impact on the operations of organizations around the world. Many companies have had to pay sick pay for those who are infected or quarantined. With the release of the Stay At Home command, organizations must quickly transition to a state that allows employees to work from home. Some companies have had to suspend or even stop operations, leading to layoffs and forced employees to take unpaid leave. Chinese companies are among the first victims. Sany Group is a company specializing in the production of excavators, road machinery, port machinery, wind turbines and other heavy equipment, with more than 30,000 employees in China and more than 40,000 employees worldwide, making it the largest and fifth largest heavy equipment manufacturer in China. After the outbreak of the new crown pneumonia epidemic, the Chinese government decided to build two temporary emergency hospitals in Wuhan in a few days. Similar emergency construction projects have been carried out in other provinces and cities. This necessitated the supply of heavy equipment, so Sany needed additional man-hours to meet that demand. But at the same time, in order to slow down the spread of the epidemic, the Chinese government extended the statutory holiday after the Spring Festival, and the local government also issued an order to postpone the return of people to work, as a result, more than 50% of Sany Group's employees could not return to work, which threatened the normal operation of the enterprise and the timely delivery of orders. Although workers were allowed to return to work in some areas after a few weeks, the Group still faced challenges in controlling the risk of infection in the workplace.

3.3. Human Resources "Skunk Factory" Method

In order to address the challenges posed by COVID-19, on January 26, 2020, Sany Heavy Industry Group established the COVID-19 Working Group, led by the Chairman of Sany Group, as well as the President and Vice President. In order to meet the cross-functional characteristics of the "Skunk Factory", the working group members include employees in the departments of

operations, human resources, sales and so on. In addition, the Group has requested all departments and manufacturing facilities to establish their own working groups by 7 February 2020 to respond to the rapidly evolving outbreak. The team-level working group has also established a mechanism for daily reporting of coronavirus outbreaks to ensure that the latest situation of cases within the organization is made public. They met daily and quickly released the COVID-19 Prevention Handbook within two weeks, providing comprehensive guidance for employees in the factory to telecommute, return to work, travel, accommodation, catering, etc. The manual outlines three principles: (1) prioritizing the health and safety of workers; (2) implementing and managing remote work using information and communication technologies; and (3) ensuring safe resumption of work. According to the newly established guidelines, Sany Group employees are divided into five categories according to the level of infection risk. Relying on the Group's existing electronic human resources and cloud computing infrastructure, health and travel information of five categories of employees is collected every day, aggregated by the Group working group, and fed back to the working group of each department and factory. HR departments collect attendance data through cloud computing systems, conduct secure remote training for employees, handle employee leave and compensation, conduct remote recruitment, update information and communicate it to employees immediately through online systems. This "skunk factory" approach has led to the development of a group-wide centralized hub that encourages employees to draw guidelines and resources from it. At the same time, information is also passed on within and between different functions for effective communication to support business continuity. Clearly, this approach has yielded effective results. In the overall signs of China's economic recovery, Sany Group is also recovering. As of March 9, 2020, more than 90% of employees have returned to work. The Group expects its manufacturing capacity to reach a historic peak at the end of March 2020 (Fang, 2020). In addition, this experience is also a test of Sany Group's ability to handle disruption situations. According to the Group's HR Manager, the experience provides an opportunity for Sany To further deepen the digitization of its human resource management and other business management, helping to identify and optimize limitations in its workflows and to reflect and learn at an organisational level for long-term benefits. All in all, this approach helps to develop Sany's ability to integrate human resources, employee inclusion, and cross-cutting work.

4. Conclusion

Through the example of Sany Group, we try to outline how the "Skunk Factory" plays a role in human resource management. In addition to the need to follow rules, procedures, and daily expectations, people engaged in "skunk factories" have the ability to act quickly when opportunities, threats, or concerns arise. In the case, Sany Group uses the "Skunk Factory" to address different HR challenges in the VUCA environment as it needs to deal with the unique threat posed by a new, fast-spreading infectious disease, underscoring the importance of creating a one that collects and shares information and acts accordingly to maintain business continuity. The evidence from our case shows that the value of the "skunk factory" is twofold. First, the Skunk Factory team helped companies weather the challenges of a rapidly emerging, unprecedented environment in a more direct way, and delivered results quickly, which might not have been possible by relying solely on traditional structures. Second, experimenting with "skunk factories" in a unique environment in a more indirect way has helped organizations build the ability to work in a flexible way. In fact, in addition to the immediate results of the above discussion, there are some indications that the impact of the "Skunk Factory" may be longer-term. This is because through the process of deploying a "skunk factory," organizations gain the ability to adopt new "skunk factories" as opportunities and challenges arise. That is to say, by working flexibly and autonomously across functional areas to achieve mission-related goals, the knowledge and skills acquired by the personnel of the "Skunk Factory" are highly

transferable in the project, and the institutionalized work practices largely guarantee the long-term impact on the organization. Thus, this approach not only provides an opportunity to promote innovation and efficiency by improving the organization as a whole, eliminating threats that could otherwise seriously hamper business operations or the reputation of the organization, which is why "skunk factories" have been criticized as a temporary solution. However, our example shows some of the permanent organizational changes brought about by the "Skunk Factory". During the epidemic period, Sany Group integrated the resources of all departments of the company and encouraged interconnection and cooperation between various departments. In addition, in recognition of the potential of digital platforms during the pandemic, HR departments are re-examining existing procedures, which could contribute to the future development of remote work.

The COVID-19 crisis is having a significant impact on organizations around the world and is likely to continue for some time. This may be the best time to organize the implementation of a "Skunk Factory" approach to address new and unexpected HR problems that may continue to arise. From a practical perspective, the appropriate use of "skunk factories" adds another tool to an organization's people management tools and potentially broadens and enhances an organization's ability to respond to today's complex and ever-changing business environment.

5. Limitations

It's worth noting that the "Skunk Factory" is not a substitute for rigid organizational structures, but rather to complement and enrich a wider range of features (Larsson, 2019). But for the sake of reality and balance, it's important that we also acknowledge the potential negative consequences of using skunk work in a human resource environment. Research on the use of "skunk factories" to address technical challenges related to products and services tends to focus on the positive outcomes of this structure, with little discussion of any negative consequences. For example, one of the most important threats associated with the "Skunk Factory" is the misalignment or disconnection between the main organization and the employees of the "Skunk Factory" skunk factory. If the connection becomes too loose, there is a risk that the "skunk factory" may move too far in the direction the team expects, and that some innovations that may be suitable for adoption by a wider range of organizations are not recognized. It is worth noting, however, that considering that it is crucial that the "Skunk Factory" is able to develop and operate in an extremely autonomous manner, it is necessary to maintain a careful, continuous balance between disconnection and proximity. Similarly, we can imagine several potential negative consequences of using "skunk factories" in human resource management. While what we describe as a "skunk factory" is useful when dealing with unconventional problems that require rapid response and innovative solutions, the frequent use of "skunk factories" may indicate that a formal HR department has inert problems, is understaffed, or outdated, or that it lacks the ability to address these issues when they arise. In fact, because HR skunk teams are defined as operating autonomously outside of traditional HR functions, they may be prone to inadvertently deviating from the company's overall HR strategy, proposing solutions that work in the short term but run counter to other strategic decisions. This can create a power struggle between employees in traditional functions and employees in "Skunk Factories," which can hinder the acceptance and implementation of solutions proposed by "Skunk Factories." Thus, in an ideal world, an HR "skunk factory" would complement and expand the activities of existing HR functions and propose solutions that are consistent with the company's broader HR strategy, rather than pursuing an entirely different agenda. These potential negative concerns could improve if caution is taken when and how to implement the "Skunk Factory."

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