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# Future of work in the energy industry

What needs to be done to make digital transformation a success



## Dear Reader,

Digital transformation has become a cornerstone in the corporate strategies of numerous German energy suppliers. Increasingly, digitalization initiatives are being integrated into business processes and everyday business. But this will not be enough to keep pace with advancing digitalization and automation in the future. Since the COVID-19 pandemic, if not before, businesses have become more aware than ever of the need not only to use new technologies, but also to adapt working models and improve digital expertise.

The momentum needs to be used, because the technological transition is demanding a great deal of the energy sector, particularly regarding its attractiveness and jobs for digital experts. The (re)shaping of the future of work is a – or possibly the – primary lever for acquiring or retaining and developing top talent, who will drive and implement digitalization strategy. However, so far the German energy sector has been lacking in studies examining and highlighting the requirements and possible approaches to such a transformation. Against this background, we personally interviewed executives and HR managers of German energy suppliers and also conducted a quantitative survey of energy supply companies of all sizes. The aim was to identify and prioritize the levers of the future of work in the energy sector and to set out ideas for initial approaches and recommendations for action. We wanted to know the impact the use of digital technologies has and will have on the workforce, and how energy supply companies are already reacting to the changing requirements. What are the primary levers and success factors for these measures, and what is the role of the HR department here?

Our results show that the successful implementation of digitalization strategies (still) stands or falls with the human factor which, still, is frequently undervalued. It must become more or further the focus of digitalization initiatives. Achieving this is a key task of management and HR. But it is important to remember that there is no standardized, uniform, "one size fits all" solution. Rather, the shaping of the future of work is an individual journey that needs to be adapted to each company's environment.

With this study and our accumulated findings, success factors, and recommendations for action, we want to help energy utilities to focus and position themselves better, and to put words into action in this complex transformation. Moreover, the study helps companies to understand what the new world of work means for employees, what is required, and how they can make themselves fit for the future. In the end, while we are all shaping the future world of work in the energy sector, we are also all affected by it.

We would like to take this opportunity to thank all those who took part in the study, especially those who were available for a personal interview, as well as all contributors.

We hope you enjoy reading and warmly invite you to join in further discussions.

Kerstin Andreae – Chairwoman of the General Executive Management Board, German Association of Energy and Water Industries (BDEW)

Guido Wendt (Capgemini Invent | Head of Energy & Utilities DACH)

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## Introduction

The energy industry has been undergoing an unprecedented digital transformation in recent years, which has now been fueled by the pandemic in an equally unprecedented way. Digitalization is the answer to the major social and economic upheavals facing the utility industry, which are summarized most strikingly in the five Dimensions of the energy industry: decarbonization, decentralization, diversification of business models, democratization, and demographic change. Digital transformation can steer its impact in the right direction if it is used where it brings the greatest benefit to customers, streamlines internal processes, and is implemented by competent employees. As people witness digitalization fulfilling its promises – i.e., they see that the changes are actually worthwhile – a rethinking is provoked, especially with regards to existing working models and working methods and the effective use of new technologies. This view is shared by 91% of the energy suppliers surveyed. So this calls for action.

### The pandemic is a catalyst for digitalization

Our study clearly shows that the future of work is no longer ahead of us, but already has its foot in the door. The COVID-19 crisis is also proving to be a catalyst for digital transformation in the energy industry. Awareness of the need for digitalization has intensified, for even as the pandemic first took hold, companies were forced to abruptly change or realign their processes. As a result, digitalization initiatives that had already been launched and planned were accelerated within a very short time. The current state of the art is already regarded as largely able to deal with a crisis (95% of respondents). The pandemic has also shown that essential processes and activities can be carried out from home (94% of respondents). This exceptional situation has shown the huge potential of digitalization. This is increasing the willingness for further automation of processes and activities (95% of respondents). The use of new technologies and the resulting need to train the workforce is therefore gaining more attention.

### Now it is time to take advantage of this momentum

Only if employees of utility companies have the necessary skills companies will be able not just to talk about the world of tomorrow, but also to successfully immerse themselves in it. The greater the digital fitness of the workforce, the easier it is to take a leap and the more secure the landing will be. To achieve this, not only must skills be further developed – the mindset behind corpo-

rate culture and its working methods must be adapted to the digital age. Only in the right environment new skills can foster motivation and improve performance.

Among energy suppliers, the trend to forge ahead with digitalization throughout the company and to implement it in HR management in particular is becoming stronger (73% of respondents). Digitization gains are in fact subject to a caveat that assigns a key role to the HR departments: the gap between existing and future required knowledge and expertise must become close to zero. This is anything but simple. However, these days, most companies have acknowledged that enormous changes are to be expected in terms of activities, roles, and skills. However, it is still unclear where the journey is heading to and what companies can already do about it. Despite this, organizations have really started moving. This is demonstrated by the Capgemini study "Digital Mastery 2020"<sup>1</sup>, in which 67% of companies say they are open to new ideas and experiments. This is twice as much as 2018. The willingness to take employees with them into the future through upskilling has also grown. Energy suppliers are no exception.

### Our study is divided into four future-oriented topics

In order to gain a better understanding of the future of work for utility companies, the effects of digitalization were examined on the basis of the following four topics:

- Strategy, vision, and connected key technologies
- Processes and activities
- Roles and competencies
- Change management, upskilling, and HR organization

Viewed overall, the picture is consistent: digitalization will continue to shape the world of work in the years to come. Those who take their employees with them on this journey and offer professional development to prepare them for the future world of work have the best chance of being in pole position as a digital frontrunner and a sought-after employer.

# Management summary

## The workforce is facing change – but the form it takes is also up to them

90%

- More than 90% of utility companies surveyed in this study always consider the human factor when it comes to digitalization projects.



- Three quarters of companies surveyed regard the qualification of their workforce as the first response to the impact of digitalization.

## Companies are both driven by and the drivers of digitalization



- The main external drivers of digitalization initiatives are competition and cost pressure (59%), and the development of new business models (58%).



- Respondents consider process optimization and faster order processing (87%) as the most important internal drivers, way ahead of cost reduction (58%).



- Digitalization promises the greatest efficiency gains in the energy industry's core processes, such as in the processing of meter data, billing, and self-service portals, for example.

## The most important changes do not concern technology, but people's handling of it



- Digitalization is resulting in significant changes to roles and new skills requirements in both the workforce and in management.



- Interdisciplinary skills such as flexibility and agility continue to gain in importance in the development of digital solutions to improve customer satisfaction.



- The future skills requirements for the workforce are often not clearly defined. Current further training is limited to existing roles and the extension thereof but is often not yet geared towards new fields of activity.



- In most companies, HR is primarily responsible for planning and implementing training in connection with digitalization projects. In the HR department itself, this new task is scarcely reflected in changed structures and processes.

## Recommendations for change

### → Align management with the New Normal:

The decentralization triggered by the pandemic, which has forced people to work from home, is becoming the New Normal in many places. Distance leadership puts interaction and communication between superiors and staff on a new footing. A successful digitalization strategy requires a middle management that is well informed and stands fully behind it. Then, executives are also in a position to keep employees properly informed and win them over for change.

### → Optimize the communication mix:

Like any process of change, digitalization increases the need for communication in the company. There is still room for improvement in this respect in many companies, especially when it comes to feedback from the workforce. Increased collaboration between middle management and HR is the key to success, communication does not automatically improve just because executives make more and more channels available. Therefore, they should be spending more time on listening to their workforce rather than using one-way communication.

### → Plan staffing needs strategically:

Digitalization is an opportunity for utility companies to prove themselves as a modern and attractive employer. For this is the only way they can attract and retain talent. To this end, the goals of the digitalization strategy should be linked to development and career opportunities for employees. After all, they need new skills for their new activities, which give the company advantages. Digitalization projects cannot succeed without the right people on board.

### → Ensure qualification at all levels:

In the context of digitalization, the role of executives is no longer defined only by their own expertise, but above all by their ability to create agile, cross-functional teams with diverse knowledge, and to unite them in the pursuit of success. It is up to HR to create the necessary conditions for individual and flexible training and qualification. Since the need for further training is growing exponentially, HR also has to adapt its structures and processes.

### → Make Human Resources a strategic partner:

In most cases, HR has to react to the effects of digitalization on personnel. However, it would be better if HR got involved earlier on and therefore was able to act preemptively. Then, the staff would already be prepared and trained when the changes took effect. The key to success lies in management giving the HR department a mandate for strategic staff planning and responsibility for all training, and also provides the necessary funding.

# 1. Strategy, vision, and connected key technologies

According to the "Digital@EVU 2020" study by the BDEW (German Association of Energy and Water Industries), more than three quarters (77%) of utility companies in Germany, Austria, and Switzerland have or are planning a digitalization strategy.<sup>2</sup> This study shows that almost half of utility companies have made progress in digitalization projects, based on their own reports. However, companies also point out that there is still room for improvement. That is not a contradiction in terms. For after each successfully completed phase of the journey, the next stage becomes clearer and the success factors and potential of digitalization in one's own company become more transparent. Therefore, it makes sense to analyze why successes are achieved – or not – and to consider this when planning the next steps. But first and foremost, it is vital to identify the external and internal drivers behind the digitalization strategy, so that the company can chart its individual journey on this basis.

## Three times the pressure: competition, cost, energy transition

Although the external drivers behind the digitalization strategy may be diverse, the companies surveyed experienced similar effects. For more than half of respondents, the triggers are fierce competition and the resulting cost pressure, with the development of new business models as an almost equally strong motive. Energy transition and regulatory requirements are afforded relatively high priority by almost half of respondents. These points alone demonstrate that utility companies cannot disassociate themselves from the topic of digitalization, nor do they want to. "Without digitalization, energy transition cannot be successful, and supply and demand cannot be matched," says Marion Rövekamp, Board Member for Human Resources & Legal Affairs and CHRO at EWE Aktiengesellschaft. "Only digital solutions can match the available, volatile range of renewable energies to the individual needs of electricity, heating, and mobility customers."

→ "Without digitalization, energy transition cannot be successful, and supply and demand cannot be matched."

**MARION RÖVEKAMP**  
BOARD MEMBER FOR HUMAN RESOURCES & LEGAL AFFAIRS AND CHRO AT EWE AKTIENGESELLSCHAFT

Next to external drivers, internal drivers are also demanding accelerated automation with the aid of digital solutions. Process optimization and faster order processing are the biggest priorities for respondents – only then can costs be lowered. However, staff reductions are not the main focus. "For us, digitalization is an enabler, making the organization more efficient and optimizing customer focus," says Michael Lucke, CEO of Allgäuer Überlandwerk GmbH (AÜW). In these endeavors, he is in on the same page with other study participants. The overwhelming majority of companies (87%) strongly prioritize improved quality of service. A good half of respondents are guided by a focus on customer needs and the goal of improving processes.

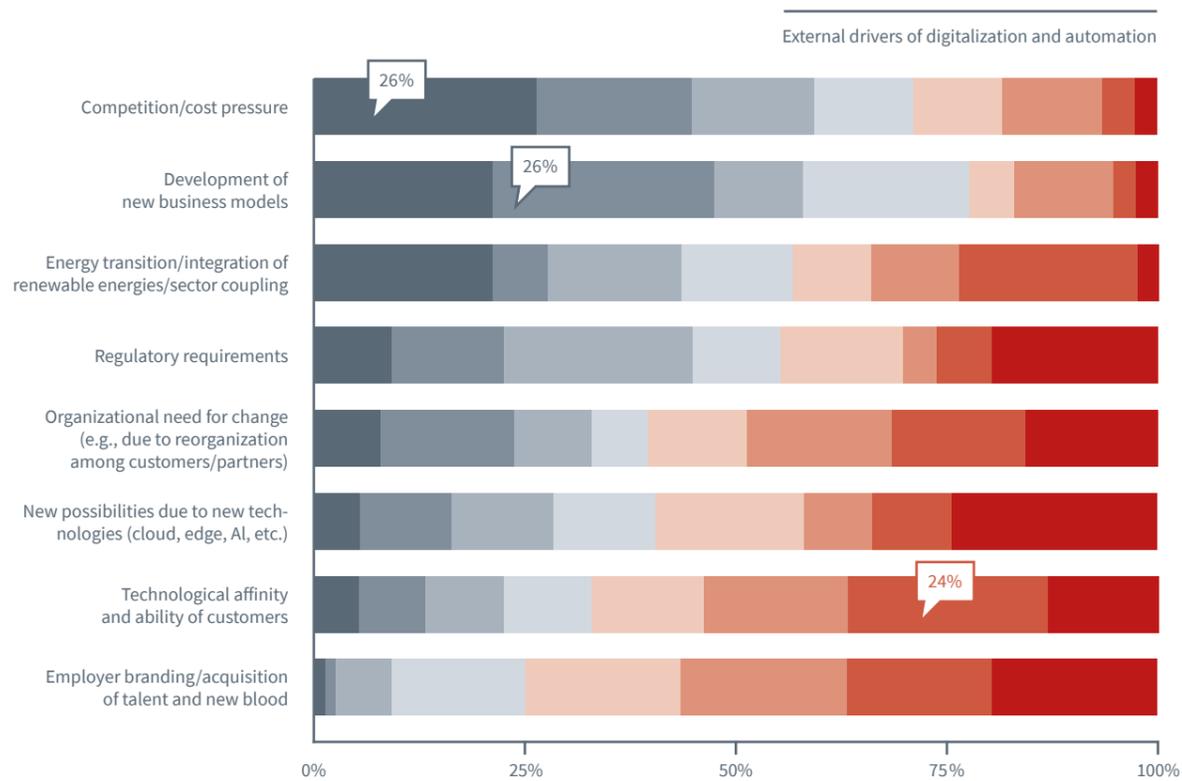
→ "For us, digitalization is an enabler, making the organization more efficient and optimizing customer focus."

**MICHAEL LUCKE**  
CEO OF ALLGÄUER ÜBERLANDWERK GMBH

Where both external and internal drivers are concerned, HR tasks such as the recruitment of (young) talent and employee development are afforded relatively low priority. Nevertheless, study participants agree that digitalization will not succeed just because everyone is talking about it. Success will largely be decided by outstandingly well qualified and highly motivated employees who focus on their customers' needs and radiate their enthusiasm to those around them.

## Findings

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**The success of a strategy depends on people**

Many utility companies see digitalization as an integral part of their medium-term corporate focus – as both a defensive and an offensive strategy: "We cannot stop digital transformation, and we should not. Because we need it," emphasizes Colette Rückert-Hennen, CHRO at Energie Baden-Württemberg AG (EnBW). She exhorts us: "We should see the advantages offered by digitalization as an opportunity to further develop our business, our organization, and also our people."

→ "We cannot stop digital transformation, and we should not. Because we need it."

**COLETTE RÜCKERT-HENNEN**  
CHRO AT ENERGIE BADEN-WÜRTTEMBERG AG

A crucial success factor for all digitalization initiatives is the involvement of all employees – preferably during the development of the strategy. This is cited by nearly all companies surveyed (93%). "The impact on employees is taken into consideration at an early stage in our actions," confirms Christian Gleimann, CHRO<sup>3</sup> at E.ON SE. This also applies "to very practical things, such as the handling of data, and creating a process whereby people do not perceive themselves purely as the object of a technical process, but rather as a human being with everything that goes with it". Which shows that for this Essen-based company, digitalization is not an end in itself.

**Practical example**

In practice, this gives rise to five questions at E.ON, which must be answered at regular intervals by cross-functional teams for different business units and job families:

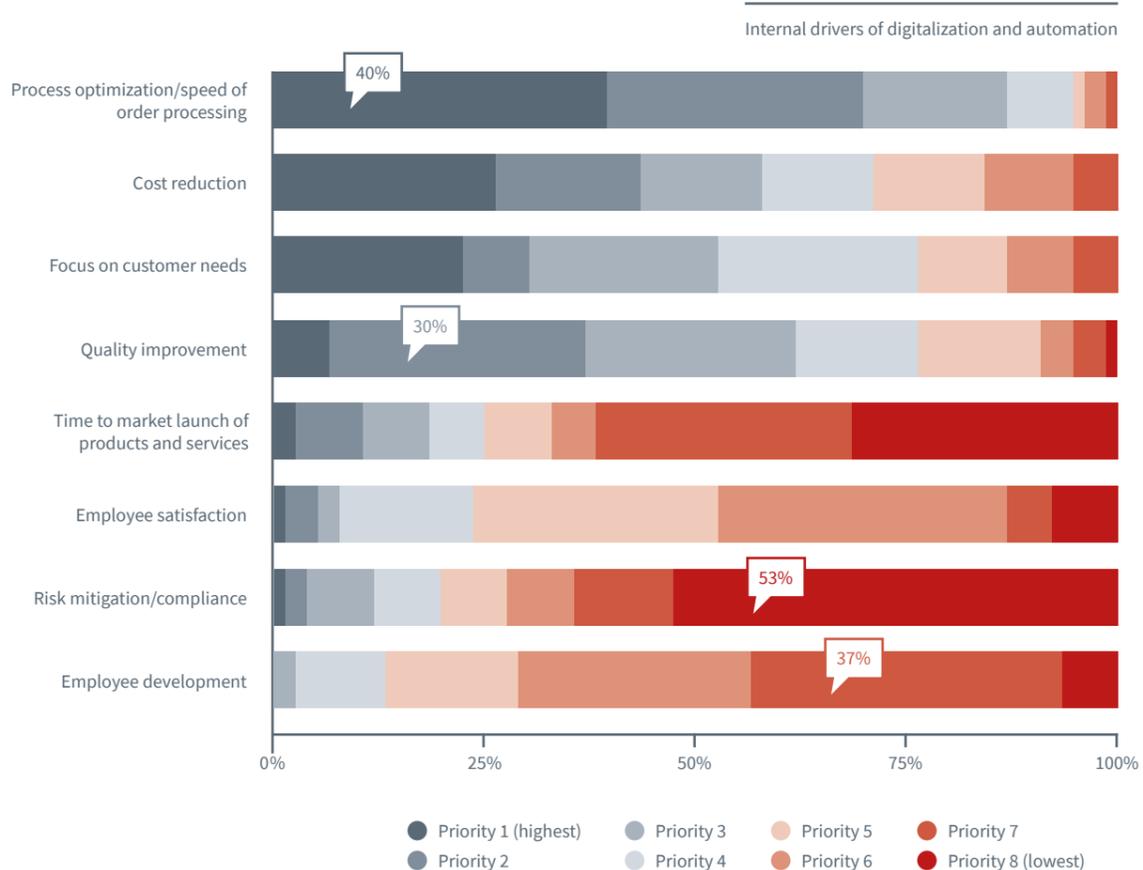
1. What are our core tasks and how are they changing?
2. What technologies are there that could help us fulfill our core tasks in order to become faster and more efficient?
3. Which specific technologies do we want to use?
4. What does the use of this chosen technology mean for employees?
5. What skills do employees need, what skills do they already have, and how do we fill any gaps?

This process is open-ended, which means that it also includes the option of not using an available technology.

**When HR is indispensable**

Professional development can only be goal-oriented and successful if the consequences of digitalization on the workforce are taken into consideration in corporate strategy. HR is therefore responsible, as the BDEW reiterates in its digital agenda for companies and policy: "Digitalization requires new, special competencies that many companies have yet to develop. And it is not just training that matters. Digitalization is also influencing and changing the recruitment of digital experts, staff development, and retention."<sup>4</sup> Regardless of a company's strategic approach to the digitalization process, a strong HR department and staff involvement and empowerment are essential to implementation.

Although the digitalization strategy may be initiated at management level, it is broken down into business units and finally implemented in cooperation with the HR department, IT, the departments, and the works council. Here, there are numerous projects and incubators, in which employees from different divisions, functions, departments, and companies try out ideas, concepts, and innovations. Berlin-based GASAG AG therefore defines the challenge of digitalization as a triad of staff development, digital thinking, and the discovery of potential.



Board Member Michael Kamsteeg explains: "What is more important is how to develop digital experts who, coming from business units and specialist departments, bring many ideas and suggestions with them, so that digital knowledge can be used to achieve better processes, better quality decisions (through the use of data, for example), and further developed products. The development and promotion of staff interest and potential is a critical factor. That is why we are investing and focusing our attention here."

At 50Hertz Transmission GmbH, small pilot projects are used as incubators to make the advantages of digital transformation tangible. Outside of everyday business, employees test new digital innovations such as the use of artificial intelligence for the complex problems of network topology optimization, or the optimization of the onboarding process for new recruits using HR bots.

For Dortmunder Energie- und Wasserversorgung GmbH (DEW21) providing freedom and flexibility in probing new business ideas outside daily routines is vital for evolving alongside four major capabilities: the "Digital Sales Hub" acts as a test laboratory for agile working methods, while simultaneously expanding the value chain. This attracts digitally savvy young talents and gives longstanding employees the opportunity to get involved in the future-oriented environment and gain new expertise.

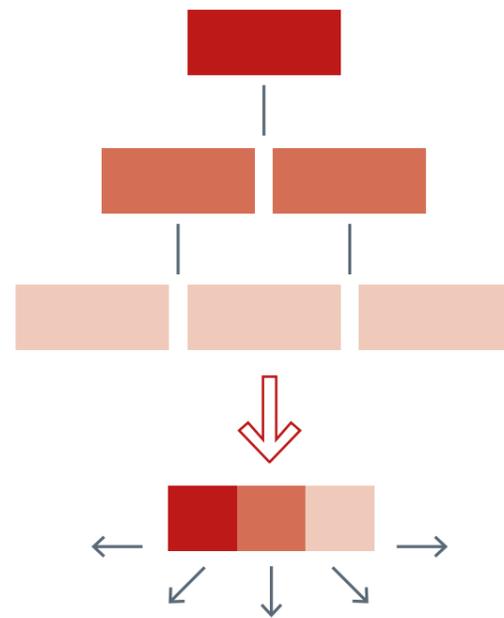
→ "The development and promotion of staff interest and potential is a critical factor."

**MICHAEL KAMSTEEG**  
BOARD MEMBER AT GASAG AG

**With digitalization, HR is all too often on the sidelines**

It is not enough if only the executive board or management take up the cause of digitalization. A strategy must be translated into actual steps, so that middle management knows what they have to do and can carry employees along with it. Most utility companies succeed. 88% of top executives support the vision of digitalization. As for middle management, the view of the strategy and its implementation is not as consistent, say one third of respondents. This is food for thought.

In order to permanently anchor the implementation of its digitalization strategy throughout the company, AÜW trained its staff back in 2013, and appointed a so-called "Guardian of the IT roadmap". The company was converted into functional units with their own purpose, and the organizational structure went from three levels to a single level. Goals continue to be set by management. But the best way to achieve them is now decided by the teams and staff in the functional units.



Given the results of the survey and the interviews about strategy and vision, it is safe to say that companies in the energy sector are making progress in digitalization. An increasing number of them have or are already planning a digitalization strategy. For two thirds of them, at least, HR and those responsible for digitalization appear to be pulling in the same direction. Most companies therefore satisfy the basic prerequisite for success.

## 2. Processes and activities

Digital technologies in the energy industry have huge potential to ensure the sustainable and efficient use of energy and environmental resources over the long term, and to actively advance energy transition. There is consensus that digitalization will massively change existing processes and workflows at all stages of the value chain and therefore contribute to the successful shaping of the energy transition. For employees, this often means a change in their current activities. However, companies see more efficient processes not only as an opportunity for ensuring successful energy transition, but also as holding the potential to counteract demographic change in the workforce. Increasing process digitalization can prevent the abrupt loss of knowledge that is looming as the baby boomer generation nears retirement.

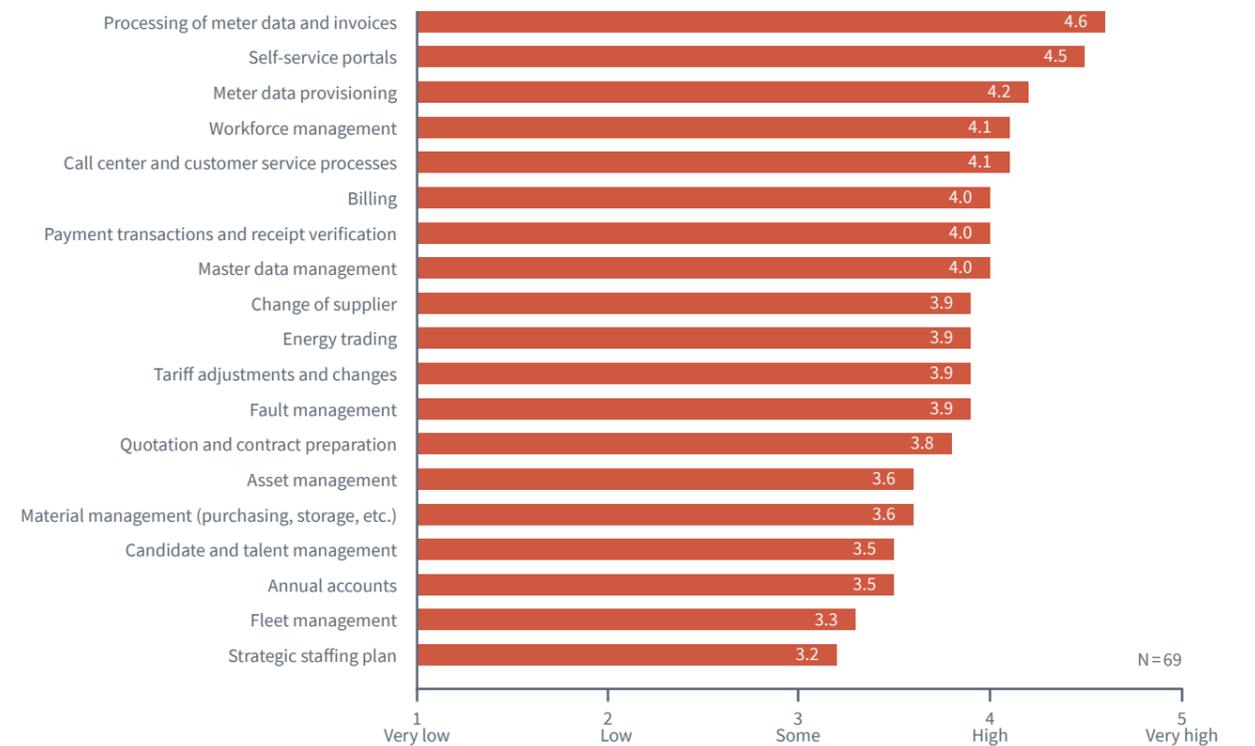
**Huge potential for improvement in core processes**

Digitalization's greatest potential to increase work efficiency lies in the core processes involved in customer acquisition, support, and retention. Respondents' answers show that there is also untapped potential in the processing of meter data and billing, self-service portals, and meter data provisioning. However, there is also a need for transformation in classic HR processes.

Thüga AG provides a good example of an HR process that was driven by digital transformation. "As well as introducing a digital personnel file, we also digitalized the recruitment process," says Thüga HR Manager Lutz Platte. The advantages of the new working methods were communicated across generations within the workforce, so that the change ultimately met with widespread acceptance.

Therefore, leaner processes were able to reduce the high workload. Thüga is not the only company acknowledging the advantage of digitalization in the recruitment process. According to the survey, around four out of five HR managers believe that digitalization has great potential to optimize candidate and talent management – significantly more than the chief executives (37%).

How do you rate the potential for digitalization to optimize and increase work efficiency in the following processes?



**Digitalization transforms job profiles**

As the transformation increasingly gains momentum, job profiles are changing. New activities are required, and new skills are needed to cope with them. The digitalization of processes will render some work steps completely obsolete. As surveyed executives and HR managers agree, this applies in particular to supporting professions that require little or no training. The results of the interviews clearly show that companies can also manage to avoid repetitive tasks among this professional group through upskilling and other creative approaches.

→ “We have established a support network for employees.”

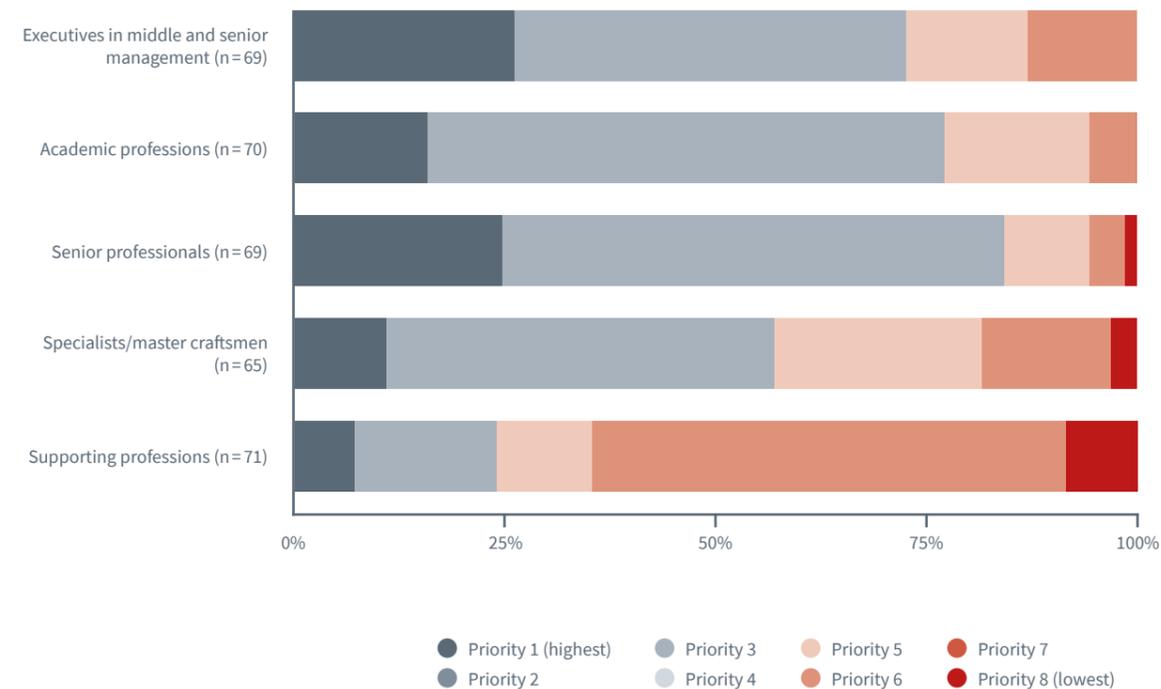
**NORBERT GRAEFRATH**  
PHR BOARD MEMBER AND CHRO AT  
RHEINENERGIE AG

Where offboarding is unavoidable, HR looks for ways to make it easier for employees to move on. The example of RheinEnergie AG is a model for alternative courses of action. As part of its digitalization strategy, which is strongly driven by communication requirements, the Cologne-based company has defined processes, established roles and competencies based on these requirements, and

repositioned its employees accordingly. "For employees whose jobs are no longer needed in the new processes, our HR department has built up a support network consisting of the Rhein-Energie Association, the City of Cologne, and partner companies," says Norbert Graefrath, HR Board Member and CHRO at RheinEnergie. Suitable new jobs are sought and found with the aid of skills analyses and interest questionnaires. This quells employees' fears about unemployment.

According to the study, qualified specialists and managers such as master craftsmen and members of the academic professions cannot or can rarely be considered for substitution by process digitalization. On the other hand, executives see more potential for substitution in middle and senior management. This view is not shared by the HR managers surveyed, however.

How do you rate the substitution potential of today's professional groups?



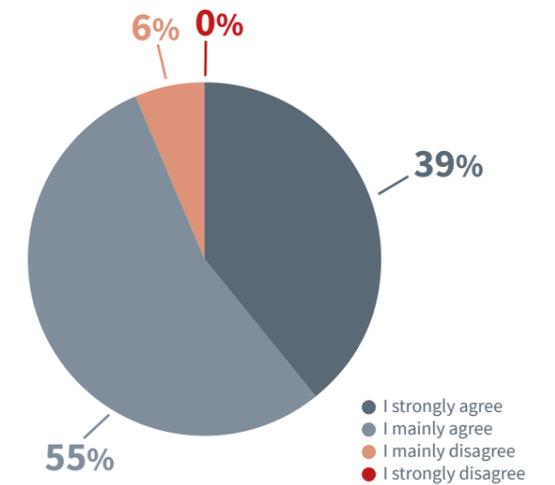
# 3. Roles and competencies

The tasks involved in the digital transformation of the energy industry are clearly distributed. Vision, strategy, and goals established on this basis provide direction. The script is determined by the necessary processes and activities. The operating conditions form the backdrop. The actors are the executives and the employees. The success of digitalization ultimately depends on their willingness and ability to support the transformation and to acquire new skills.

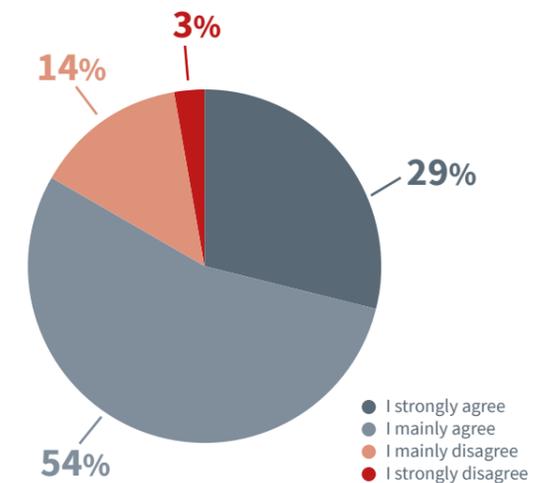
**New roles to fill**

Energy suppliers agree that as digitalization progresses, numerous roles will look much different in the short and medium term. Almost 94% of respondents from utility companies completely or mainly agree with this statement. This is especially true for large and medium-sized companies. Furthermore, many new roles will be created. Fundamentally, this applies both to the workforce and middle and senior management. As employees' roles and the necessary skills change over time, employees will need to be more flexible in the future. This presupposes an understanding on the part of employees that their employability depends on their willingness to acquire new skills and take on new roles.

We expect significant role changes due to new skills requirements in the workforce



We expect significant role changes due to new skills requirements in middle and senior management.



## Creating clear roles

Roles are the link between the individual and the organization. They are the result of attributes ascribed by oneself and by others: How do I want to be in the work context? What is expected of me? A clear understanding of roles helps staff to cope with the complexity of working life. To this end, roles need to be understood, acknowledged, and accepted by employees. As organizations undergo constant change, roles must constantly be reviewed to determine whether they are effective and necessary. Employees are therefore required to continuously adapt.

Interviewees' responses underline the need to recalibrate roles. "Not only are existing roles changing – new roles are emerging with completely new requirements that do not even exist today," confirms Jamina Kleine, Head of Learning & Development and HR Digitization at E.ON. However, even these new roles will not last forever due to the continuing high pressure for change. Companies face a never-ending task, which they must undertake – and are already undertaking in some cases – as part of strategic staff planning. This can lead to highly innovative results: "Due to role-based organization and independent functional units, we no longer use traditional job descriptions. Enabling roles, competencies, and delimitations are mapped in an IT tool (Confluence), which is updated several times a year," says Michael Lucke, CEO of AÜW. Respondents are unanimously convinced that the skills of executives and non-executive employees will also change significantly along with the roles. Deriving required skills from roles promises companies the ability to develop new business models and remain competitive. Only then, strategic objectives can be achieved.

**The goal is clear, the way there not yet**

Within the context of corporate digital responsibility, it is the task of energy suppliers to encourage employees in their ability to handle data and new technologies responsibly. This is not in doubt. However, with regard to specific objectives and the shaping of the workforce transformation, there is anything but certainty. In the survey, the statement "We have defined the skills and competencies we need to implement our digitalization initiatives" revealed a mixed response: around 46% of respondents completely agree or mainly agree, while 45% completely disagree or mainly disagree. The interviews also reflect the traditionally high level of uncertainty in times of

disruption: How should the new roles actually look like? Which competencies, knowledge, and skills will executives and team members need in the future? And how do we achieve our objective without diversions and wasting energy? Respondents therefore agree on the thrust of the required change: new roles must be clarified and the necessary competencies defined. Both management and the workforce mention these expectations for HR and the supporting change management. Heike Heim, Chair of the Executive Board of DEW21, affirms: "HR is essential for supporting and ensuring the success of the entire transformation processes. Change initiatives are important in order to provide both employees and executives with methodical support and a guiding hand, and to motivate them for change." However, the study also shows that the road from knowledge to implementation is far from comfortable. Only roughly one in three companies (around 30%) has already identified new, higher-quality roles for employees whose jobs are threatened by automation.

→ "HR is essential for supporting and ensuring the success of the entire transformation processes."

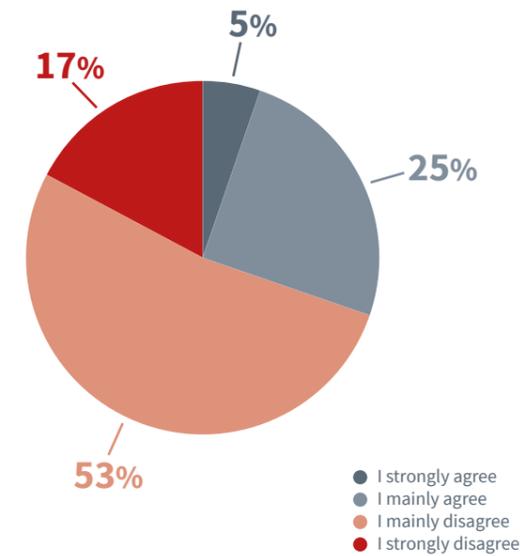
**HEIKE HEIM**  
DORTMUNDER ENERGIE- UND  
WASSERVERSORGUNG GMBH (DEW21)

**New roles in the energy industry**

In the energy sector, as in other industries, typical roles with known potential for automation (e.g., accounting, billing, customer service, trading) will change and therefore require new skills. In addition, some roles specific to the energy industry are also changing and require upskilling. Two examples, among others, were cited in interviews:

- Network technicians will need a better understanding of data and software as well as programming skills, and their work will increasingly involve coordination and planning.
- New positions such as drone/robot pilots, for maintaining infrastructure such as industrial plants and pipelines, require augmented reality skills.

We have identified new, higher-quality roles for employees whose current tasks are being supplanted by automation.

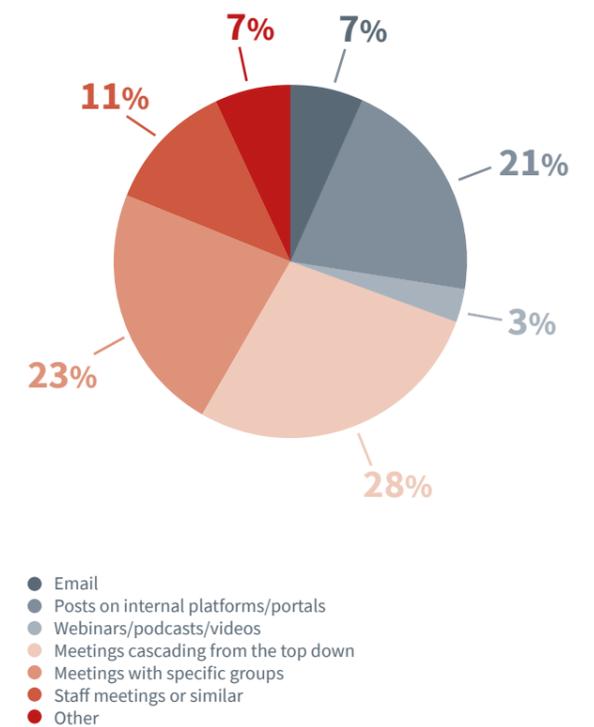


Perhaps the identification of new roles has been hesitant because the pace of change is increasingly seen as threatening, perhaps also because of the sheer number and diversity of challenges facing the industry. However, taking more time would be devastating, because change is unstoppable. Moreover, rather weak communication with employees on the part of executives is evident when it comes to conveying the importance of digitalization for the company and its possible impact on the workforce. This may not be expedient, but it is understandable given human nature and companies' own uncertainty: What should we say? We do not yet know ourselves exactly where this journey will take us. The frequent lack in communication about the effects of digitalization on roles and competencies in a company becomes even more obvious if we take a look at the times when executives talk to their employees about future roles and tasks.

Traditional team and departmental meetings account for the majority of all discussions on this topic (28%). Of course, these are chiefly concerned with everyday business, information, reporting, and task allocation. Staff meetings are also more suitable for topics that are of general importance to all employees. Emails, webinars, and posts on portals may ensure the flow of information in one direction, but these are not two-way communication channels for exchanging knowledge and opinions. Conversely, meetings in which specially chosen, relevant participants

deal with employees' future roles are an effective channel. Specific meetings of this kind are particularly helpful in tackling these issues in depth, and experience shows that they generate the largest output of feasible measures. They also require a lot of preparation and organization, however. On the other hand, only less than a quarter of respondents (23%) make use of them. Nevertheless, digitalization and the resulting changes and implications for roles and skills should be discussed regularly at traditional team and departmental meetings. In this way, continuous change is transparent and incorporated into everyday working life.

What channels do executives use to communicate with employees about roles that are changing or emerging due to digitalization?



**Digital transformation demands interdisciplinary skills**

The overview below of the areas in which study participants expect digitalization to provoke the most obvious changes provides markers for the route to be taken in defining and encouraging new competencies and skills. It is revealing that most small companies (57%) expect a moderate change in future competencies and skills, while around two thirds of medium-sized and large companies foresee major changes.

Regarding the question which skills will become more important in the medium term as digitalization advances, respondents are in agreement: primarily interdisciplinary skills such as flexibility, creativity, ability to innovate, and process thinking. Larger companies emphasize the relevance of digital learning skills and entrepreneurial thinking, while smaller companies underline digital customer and service management. Four out of five study participants believe that distance leadership will be important in the future, while other skills are considered as more important in comparison of the answers given by the respondents. Interestingly, this skill is considered very relevant by HR managers (48%) and less so by executives (21%).

**Distance leadership**

Increasingly decentralized patterns of work call for a rethink and the reshaping of interaction and communication between executives and employees. The digital age, with increased distance leadership, demands a new, authentic leadership model. In other words, space needs to be created in which people and organizations can evolve with a balance between stability and flexibility. This requires mutual trust. Good executives not only lead – they also invite all those involved to help shape shared objectives.

Successful virtual executives build identity, foster commitment, and promote team spirit. To do this, they employ the three Cs of virtual management:



**Clarity**

- Define objectives and roles
- Structure work with clear guidelines and boundary conditions
- Define KPIs for measuring success
- Manage performance



**Communication**

- Give top priority to information and discussion
- Establish trust and respect
- Create transparency regarding progress and performance without micromanagement
- Avoid cognitive overload

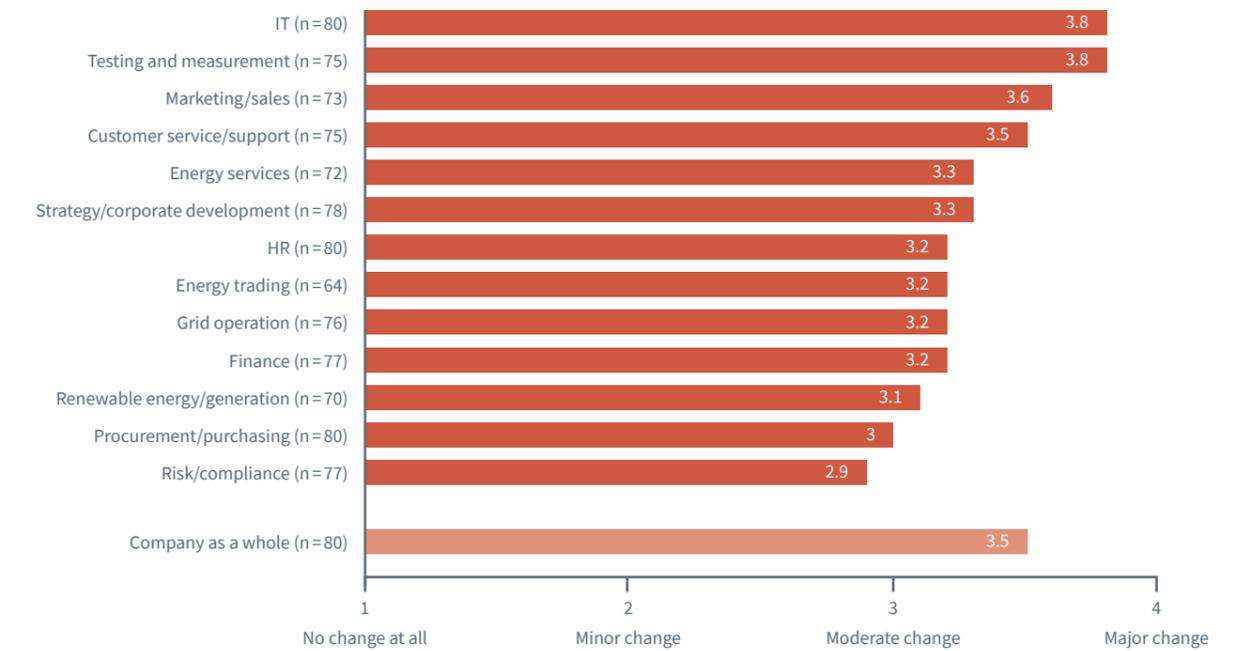


**Collaboration**

- Set aside time for personal interaction
- Build up virtual culture and strengthen a sense of community
- Provide emotional support
- Celebrate successes together

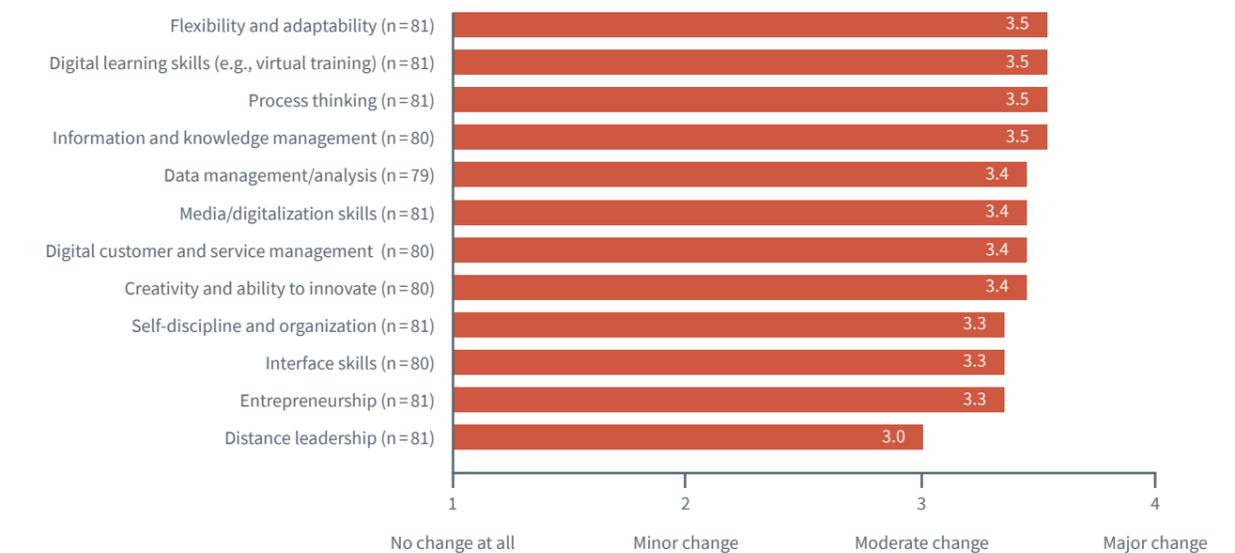
In which areas (or departments) will the required competencies and skills change/have to change?

Degree of change in required competencies and skills



To what extent will the following competencies and skills be relevant in the next five years?

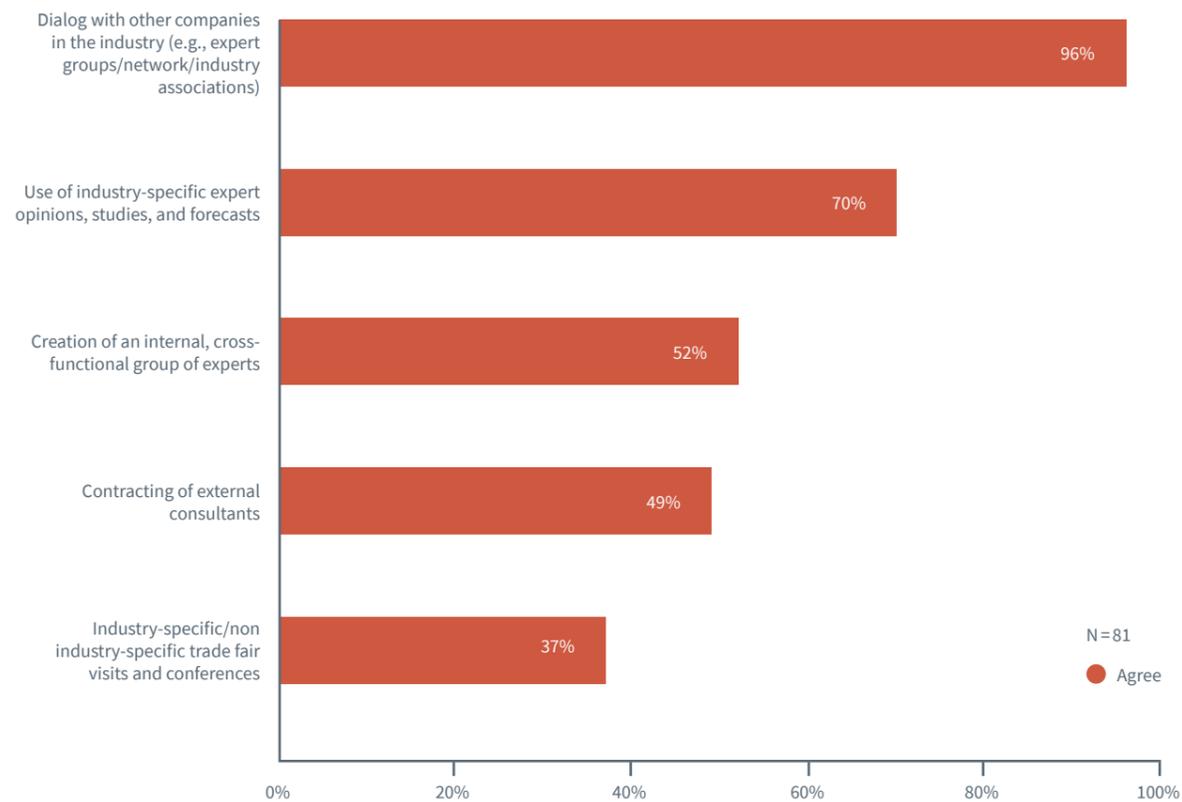
Relevant skills and competencies in five years



### What do our people need to be able to do?

To identify the skills that will be required in the future, almost all study participants exchange ideas with industry representatives (96%) and also seek specialist expertise in the form of studies and forecasts (70%). Approximately half of companies (52%) have set up an internal, cross-functional working group to learn from others' experiences and share latest developments. Two of the companies interviewed are setting a particularly exciting example. When RWE identifies a need, the Group organizes further training, increasingly in the form of virtual learning groups which, as well as professional expertise, also cover skills in leadership, change management, and self-organization. At RheinEnergie, agile working groups analyze gaps in the skills database and consider how to fill them, for example through recruitment or staff development.

We will take the following steps to identify future skills and their relevance.



## 4. Change management, upskilling, HR organization

The pace of change due to new technologies, competitive intensity, more demanding customer requirements, and regulatory pressure has increased significantly and requires companies to square the circle: speed plus maneuverability (i.e., agility) plus foresight (for long investment cycles). This is especially true for digital transformation. Energy suppliers are well aware that the power to overcome today's Herculean task is in people's heads. Michael Kamsteeg, CFO of GASAG, is representative of many: "Digitalization is not just about efficiency, it is also about expanding value creation, optimum satisfaction of customer needs, the creation of products with higher added value, and better (decision-making) quality in all areas – that is, in both the operational and administrative areas of our company."

### Change management is the master key

Some say change management is the key to success. Others say the success of digital transformation requires a whole bunch of keys – an intelligent strategy, commitment among management, intelligent communication, strategic staff development, targeted upskilling, and many more.

→ "Digitalization is primarily driven by employees and is therefore viable."

**LUTZ PLATTE**  
HR MANAGER, THÜGA AG

### Management provides the framework, the operational level takes action

The qualitative interviews make it clear that energy suppliers observe the iron rule of change management: just like other change projects, digitalization strategies are initiated top-down and then examined and finally implemented bottom-up.

At GASAG, the corporate and business unit management and Group functions develop the basic initiatives from the strategic process, which are then adapted in the scope of management workshops and the resulting feedback. This procedure is repeated on the levels below. Having launched the project, the tasks are delegated to cross-functional teams. In addition, networking formats and agile initiatives help to involve employees in finding and defining roles. This ensures that employees are motivated, committed, and goal-oriented in their endeavors. One interviewee put it in a nutshell: "Digitalization is primarily driven by employees and is therefore viable," says Thüga HR Manager Lutz Platte. "Higher-quality jobs supply the motivation for this."

At the same time, the way employees are involved in a transformation project varies from one company to another. It ranges from staff surveys, whereby the management directly receives open feedback (EnBW), to employees' voluntary involvement in maintaining the skills database

### Change management

Since every company is unique, there is no standard guide to digital transformation. Every organization has to find its own way to success, gaining experience along the way and constantly correcting its mistakes. But they all have one key to success in common: an active change management system, which involves employees early on and accompanies them through the change. This includes supporting employees with the transformation of culture, structures, and processes in mutual dialog. This gives the organization, the work environment, and employees lasting momentum. Key variables here are flexibility and data management skills.

(ENTEAG AG), to the bottom-up introduction of agile working methods for handling projects (AÜW). At the same time, this is not just about cooperation between departments, but also about employee retention, customer benefits, and therefore the achievement of economic targets.

#### Is the workforce able to do what digitalization expects from them?

This can only be achieved if staff deployment and assignments are strategically planned. The skills portfolio of the workforce is undoubtedly an essential factor in energy suppliers' success and their current and future competitiveness. Innovation therefore often becomes the top priority. This is a matter of urgency, because structural change will not wait.

The everyday business of utility companies offers numerous examples of the need for innovation. For example, the growing importance of customer service requires employees to have different skills from before, namely a high level of customer focus, process thinking, and stress resistance. On top of this, online self-service is replacing many of the tasks previously performed by people. New activities will take over their tasks at the customer interface, in digital marketing, in IT, which are performed by analysts, data scientists, scrum masters, agile coaches, and product developers, to name just a few. Whether and to what extent

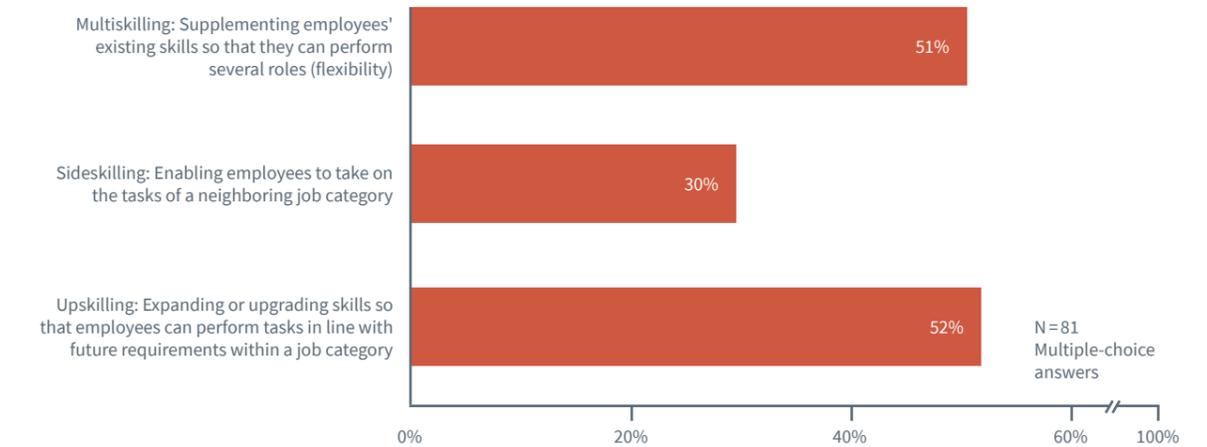
employees' existing skills profiles fit these new tasks is determined by staff planning. This maintains the company's operative viability by equipping it with adequate human resources, avoids the emergence of over and undercapacity, and prevents unplanned and cost-intensive recruitment measures.

#### Upskilling – because your own employees know the company

HR managers at utilities are under a lot of pressure to meet expectations. Previous studies have already shown that the majority of companies do not yet regard their employees as sufficiently equipped for the digital future. "44% of utility companies believe they have a clear picture of the digital skills their employees will need in the future. However, so far development of these skills has been rudimentary."<sup>5</sup>

Small companies, in particular, lack the capacity to identify upskilling needs and to develop and implement holistic training programs. Although most of them suspect that they can no longer rely on the supply from the labor market, because demographic change has long since set in and will further exacerbate the shortage of skilled workers. Therefore, they need to focus more on their existing workforce, also because the offer of further qualifications will remove the burden of uncertainty – which is a motivating force.

What kind of training measures did you initiate first and foremost in order to adapt to automation?



#### Qualification and training are driven by the needs of departments

Qualification and training, whether upskilling, sideskilling, or multiskilling, are principally initiated by the HR department (44%) and by teams in the various business units (24%); less often by teams outside existing departments (10%). Roughly half of companies prioritize upskilling and multiskilling, whereas only about 30% focus on the teaching of complementary skills (sideskilling). This is probably due to the fact that new roles and skills have not yet been defined.

#### Taking and allowing the individual initiatives

In terms of concrete action, some of the companies surveyed stand out. Stadtwerke Düsseldorf (SWD) is exemplary in deriving the need for further training from the new roles previously identified: all employee skills required by the business units and to be covered by recruitment or training must be reflected in the new roles. Hans-Günther Meier, Board Member for HR and Finance, explains: "The focus is on people, and the development of digital experts is more important than the digitalization of processes." For others, staff development is based on the realization that employees require a minimum level of digital knowledge and know-how in order to be prepared for the digital world. It is therefore in the interests of both sides "to in-

volve employees in technological progress and to ensure acceptance," asserts Michael Schmitz, Head of HR Digital at RWE. HR Director Armin Arens adds: "They then get more engaged in the process. It also satisfies their wishes and therefore results in more successful employer branding."

→ "The focus is on people, and the development of digital experts is more important than the digitalization of processes."

**HANS-GÜNTHER MEIER**  
BOARD MEMBER FOR HR AND FINANCE  
AT STADTWERKE DÜSSELDORF AG

## Upskilling | Sideskilling | Multiskilling

### Upskilling

... in its narrower sense, aims to expand or develop skills within the current job category. On the one hand, this includes the necessary skills for successfully performing known activities with the aid of new technologies. On the other hand, it may also cover skills required for accomplishing high-quality tasks resulting from automation. The employee's role remains relatively stable – it is the focus of the work that changes.

### Sideskilling

... is required when employees have to learn new activities that normally belong to a neighboring job category. Here, the focus is on learning complementary skills.

### Multiskilling

... prepares employees for taking on different tasks and is aimed at developing a more flexible workforce, for example using job rotation. This way, new skills are added to existing ones, so that staff can perform several (related) activities and roles.

→ “It is in the interests of both sides to involve employees in technological progress and ensure acceptance. This also results in more successful employer branding”

**MICHAEL SCHMITZ**  
HEAD OF HR DIGITAL AT RWE AKTIENGESELLSCHAFT  
& **ARMIN ARENS**  
HR DIRECTOR AT RWE AKTIENGESELLSCHAFT

Respondents are almost unanimous in regarding the encouragement of self-motivation among employees as a powerful lever, for example when tackling the challenges inherent in staff development. With a modern learning culture, agile learning methods, and an appropriate mindset, EnBW encourages employees to develop themselves independently and self-reflectively. "It is important to us to maintain intrinsic motivation and therefore make EnBW an organization of continuous learning," says Colette Rückert-Hennen, CHRO at EnBW. For example, the company makes use of a learning platform where employees can rate themselves on a competence scale and skills that will be needed in future and subsequently can obtain feedback on their further development. At ENTEGA, workforce upskilling is encouraged by access to LinkedIn Learning, among others. "In recent years, we have invested a great deal in central staff development in order to provide employees and executives with the best possible support," says Andreas Niedermaier, Board Member for HR and Infrastructure at ENTEGA. "We quickly switched to digital formats. And that worked very well." Employees share information on necessary and desirable further development opportunities on their own initiative.

→ “In recent years, we have invested a great deal in central staff development in order to provide employees and executives with the best possible support.”

**ANDREAS NIEDERMAIER**  
BOARD MEMBER FOR HR AND INFRASTRUCTURE  
AT ENTEGA AG

GASAG is also a lighthouse when it comes to training digital experts in formerly analog departments. A dozen employees in the Finance department received training or professional development on a voluntary basis to become experts capable of linking digital tools with the needs of the financial sector. This ensures that digitalization enjoys widespread acceptance and gives employees opportunities for further development, which has a motivating effect. These two examples call on employees to take their development into their own hands. To do this, HR needs to give them freedom to learn, i.e., make time and resources available.

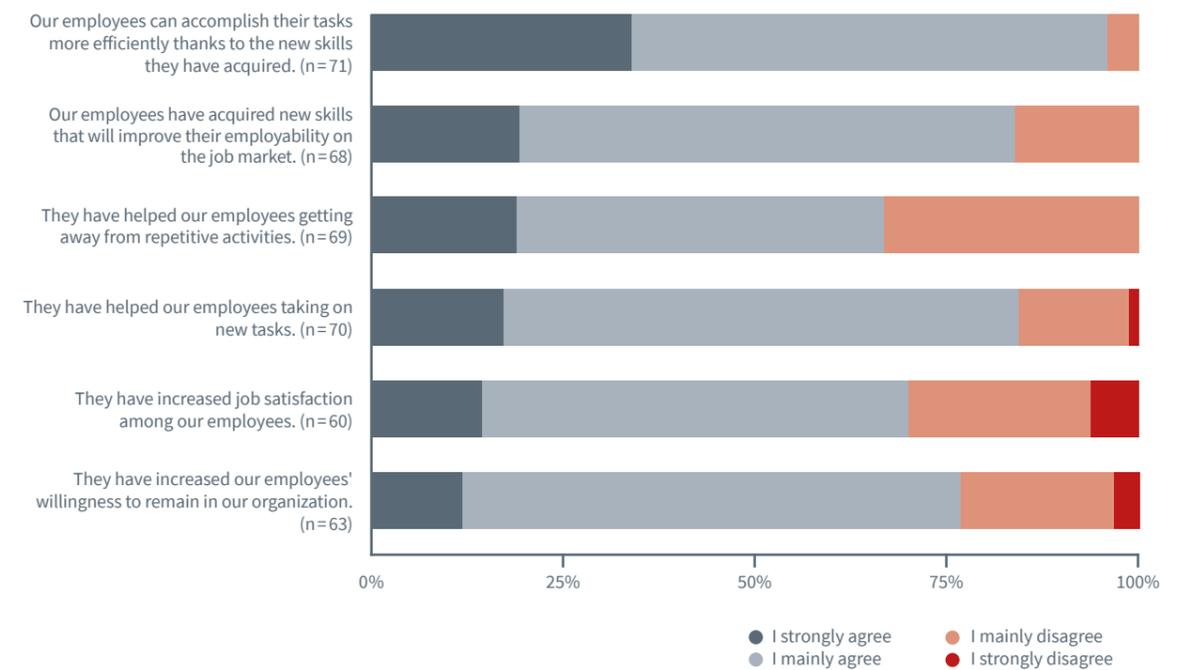
#### Without the support of management, any steps taken may come to nothing

The majority of respondents are aware that digitalization goes hand in hand with substantial investment in employees. And support is not limited to finance. Rather, executives are also expected to lead the way in learning. Upskilling does not end when one enters the boardroom. EnBW sets a good example for the further development of executives. The Board launched a program for the development of individual, shared, and collective leadership ("Leadership Development Journey"), based on "Future Skills for Modern Leadership", which was developed for this purpose. At the beginning of this management development program, workshops were set up for top and senior management who, in addition to learning new skills, also gained an improved ability for self-reflection. The development program has also been cascaded to lower levels of management.

The success of these training measures so far indicates that the further training programs initiated are primarily limited to additional skills required in existing roles. The quantitative evaluation by the overwhelming majority of respondents (96%) confirms that employees are able to perform their tasks more efficiently thanks to their newly acquired skills. Most employees (84%) are also well prepared for new tasks. However, upskilling into new areas of activity apparently still suffers from a lack of clarity as to where the journey is heading.

From the survey, it is clear that there are some obstacles to upskilling. More than three out of five study participants (62%) complain about a lack of time for implementing training initiatives. 47% complain that employees are insufficiently motivated, and 41% feel their organization lacks a culture in which learning and further development are actively promoted. In addition, almost a third of respondents cite a lack of support from executives. In this context, Sylvia Borchering, CHRO and Member of the Executive Board at 50Hertz, highlights: "HR has to provide executives with stability and guidance." Only then can they pass these down to the workforce.

How have employees benefited from training measures?



→ “HR has to provide executives with stability and guidance.”

**SYLVIA BORCHERDING**  
CHRO AND MEMBER OF THE EXECUTIVE BOARD AT  
50HERTZ TRANSMISSION GMBH

#### Information about training is provided – but there is not enough discussion

Executives believe it is important to prepare their employees for the impact of digitalization, to respond to their fears, and to train them accordingly, for they clearly see the risks of declining motivation and willingness to learn. But although companies attach great importance to upskilling and have already launched many further training initiatives, there is still need for improvement where communication of the relevant changes and the resulting cultural change is concerned.

The study suggests that senior management and HR have different views regarding the frequency of communication. The management or executive board assumes that communication with the workforce is more frequent than HR Managers perceive it or get it reflected back from the employees. On the other hand, there is evidence to suggest that HR departments receive feedback from employees more often than do members of the management.

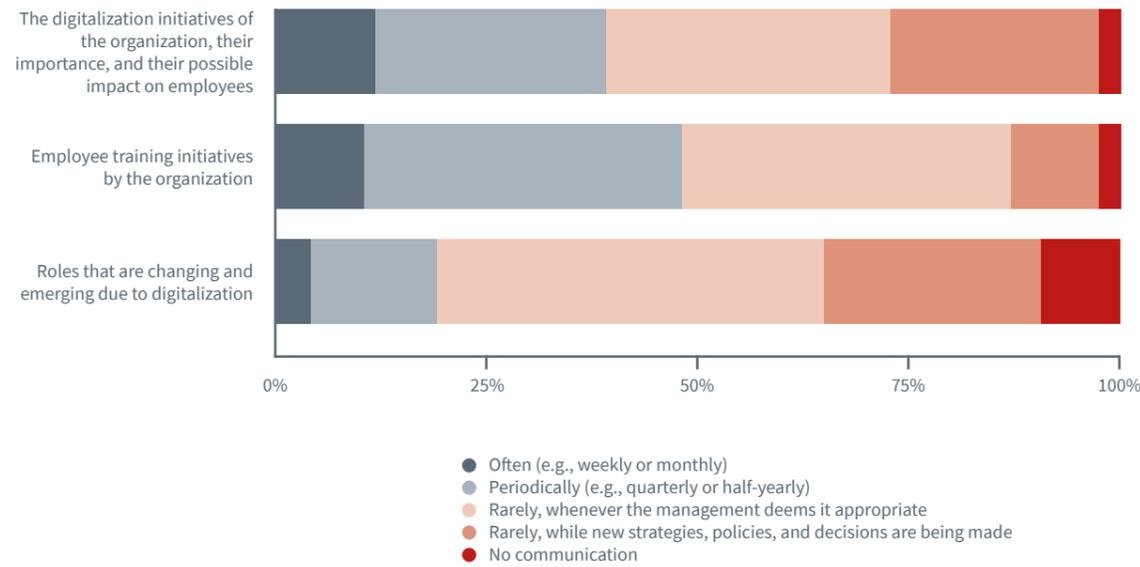
If HR offers employees even more opportunities for feedback than before, i.e., becomes even more approachable, the different perspectives are likely to converge.

In over half of companies, information on digitalization and training initiatives tends to be irregular and rare (quarterly/yearly). As mentioned on page 17, this may be due to widespread uncertainty about the consequences of digitalization and what concrete effects these will have on the available skills portfolio.

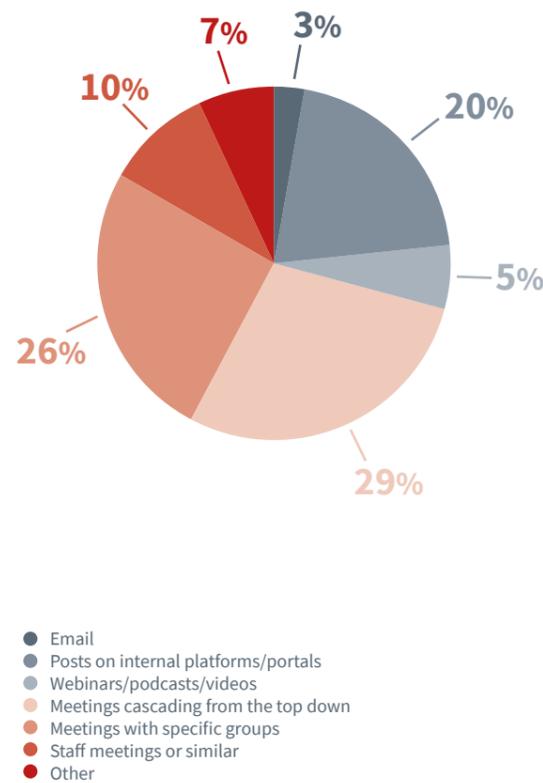
#### Digitalization is changing the role and tasks of the HR department

It goes without saying that the work of HR is set to change dramatically as digitalization progresses. The ultimate goal is to anticipate its effects and manage them proactively. To surmount this challenge, it is crucial to intuit and understand the latent fears of the workforce and to respond to them in a manner that is both targeted and empathetic. Traditional (one-sided) communication via the intranet and proclamation meetings is not sufficient. Increased bidirectional exchange should supplement the one-way information. In this respect, ENTEGA stands out as a lighthouse: regular communication with employees in the form of recurring pulse surveys via the intranet and the disclosure of projects and formats established by the executive board ensure transparency and prevent fears from emerging and consolidating.

How often do executives communicate with employees about the following subjects?



What channels do executives use to communicate with employees about training initiatives?



**HR can do even more here**

HR itself is undergoing technological change. Just as in other specialist departments, processes, and activities, roles and skills will have to change, especially if HR wishes to be perceived as a driving force for change. The key to success here is close, cross-functional cooperation with all levels of the business units.

Simply understanding the need for change does not equate to tackling it with full force. With digital transformation, HR departments primarily rely on the further qualification of their workforce. The HR department itself is only gradually coming round to the new, agile imperative of collaborative action.

However, many companies have initiated fundamental structural changes. Often, special roles have already been identified and teams have been formed to take care of HR services such as upskilling, sideskilling, multiskilling, and outplacement<sup>6</sup>. This is the case at EWE Aktiengesellschaft, for example, where much has already been achieved in terms of HR digitalization: digital selection procedures, processes, and files have been used here for some time. "Growing demands on Human Resources have gone hand in hand with a higher and expanded degree of qualification and further training," explains Marion Rövekamp, Board Member for Human Resources & Legal Affairs and CHRO at EWE Aktiengesellschaft.

HR has moved closer to the specialist departments and prioritizes digitalization issues from their perspective and

with an eye for the appropriate processes. A suitable database is also vital. To quote the EWE Board Member: "Self-service portals are becoming more important than shared service centers, as employees can initiate many processes independently and digitally on the intranet." Above all, it is important that employees are involved in the digitalization strategy at an early stage and their needs are taken into consideration.

The above success factors, structural changes, and examples indicate that digitalization could bring down the three pillars – centers of expertise, business partners, and shared services – of Dave Ulrich's HR model.<sup>7</sup>

**The goal: HR as a central point of contact for digitalization issues**

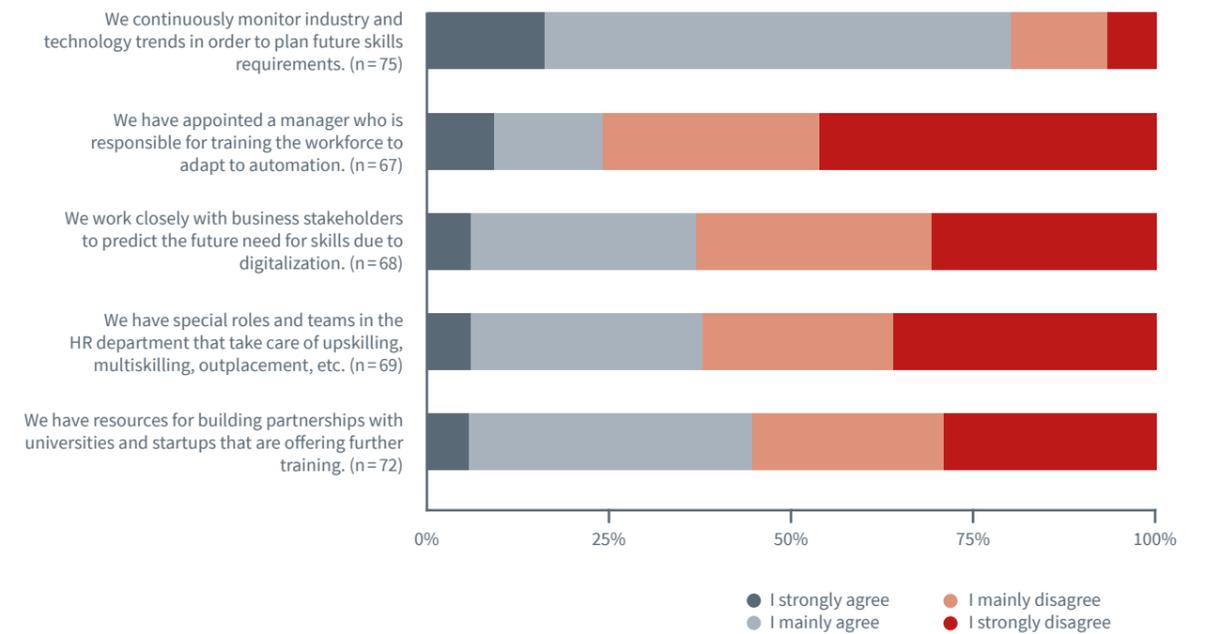
Too few – barely half – of HR departments are collaborating with specialist departments to the extent necessary to match the need for future skills and further training with the requirements of digitalization. In this regard, EnBW serves as a good example: Based on their strategic workforce planning in which future digitalization potential and the corresponding impact on people are discussed with the business, HR identifies the new roles. This way, consultants become the key contacts for digitalization issues. "HR has to withdraw from the role of advisory service provider and develop the self-confidence to acquire its own skills around digitalization," says Colette Rückert-Hennen, CHRO at EnBW. This is the only way that HR can know the further training needs of employees.

The bar is high – but it must be reached if HR wishes to be on an equal footing with management. Lutz Platte, Head of HR at Thüga, is also looking to join forces with the specialist departments, and takes the requirements of digitalization into consideration in staff planning. He explains his motive: "HR must be involved in the discussions on digitalization so that we can empower employees with the appropriate training."

**It is better to develop your own people than looking for new ones on the job market**

There is generally a clear trend among energy companies to prefer the further training of existing personnel to external recruitment. Almost three quarters of respondents (74%) say that their approach to digital transformation is training rather than the targeted recruitment of new workers (15%). It is the unanimous opinion of study participants that dismissals are not an option. Rather, existing employees should be trained and their employability therefore maintained.

How have you changed your HR department to make it easier for the workforce to adapt to digitalization?



→ “HR can only be seen as a credible advocate for change if we ourselves live out and represent a new mindset, a new culture, and new practices.”

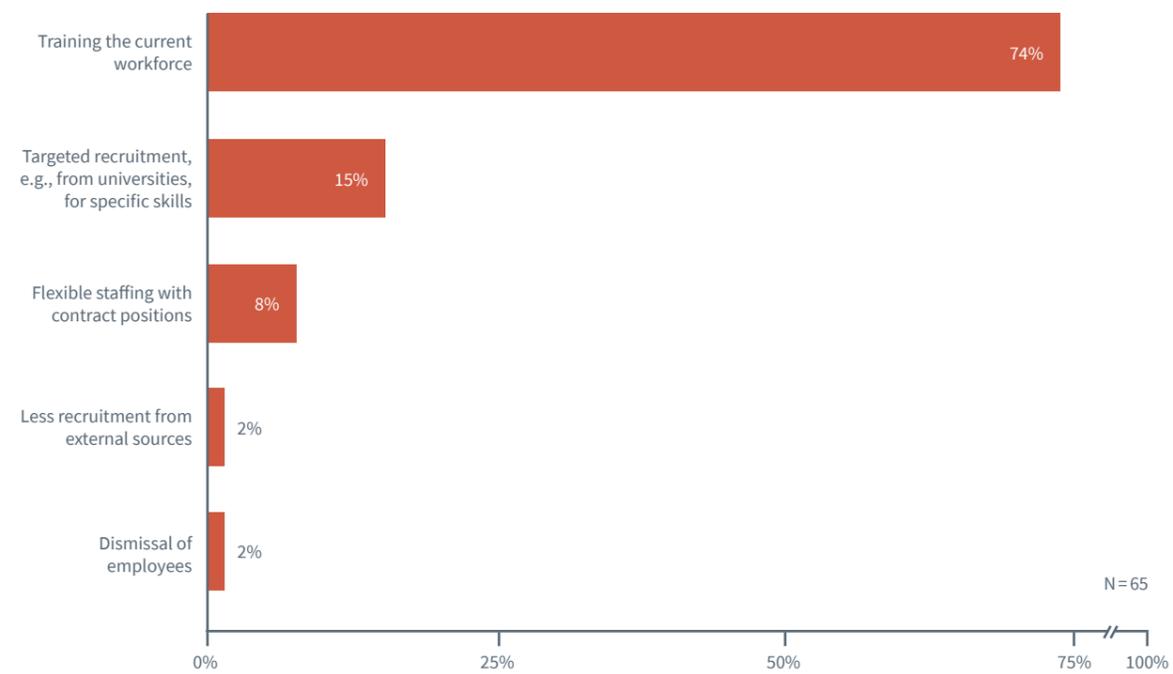
**CHRISTIAN GLEIMANN**  
SENIOR VICE PRESIDENT OF HR AT E.ON SE

**Old paths will not lead us to new opportunities**

For the interviewees, there is no question that HR itself must get more involved in digitalization than ever before. Christian Gleimann, Senior Vice President of HR at E.ON, hits the nail on the head: "HR can only be seen as a credible advocate for change if we ourselves live out and represent a new mindset, a new culture, and new practices. As long as we terrorize executives with crude Excel spreadsheets, while telling them all about these marvelous apps and digital workflows, we have a credibility problem." In the eyes of the interviewees, HR plays the role of the enabler and will evolve into a knowledge multiplier that will continuously be asked about digitalization issues and needs to come up with the answers. In this context, it is not just employee qualifications that will have to improve in HR. Hans-Günther Meier, CHRO and Finance Director at Stadtwerke Düsseldorf, goes even further: "We want to radically digitalize HR. We need more digital workflows and less file management. No one should have to process vacation requests manually anymore."

It is therefore clear that in most companies, the HR department may be responsible for planning and implementing training measures, but it is often not specifically prepared for the challenge of upskilling, sideskilling, and multiskilling. Given that digital transformation is often still in its infancy in HR, it is important to exploit this potential for digital excellence.

What was the primary response of your HR department to the impact of digitalization on the workforce?



## Digital HR@Work – Implications and recommendations for action

In order to successfully implement complex change projects, the commitment of middle management is just as essential as employees' willingness to change. This was confirmed most impressively by utility companies' rapid and important response to the COVID-19 pandemic. Since March 2020, hundreds of thousands of employees have been working from home – largely without friction thanks to the modern technologies already in use today. This is backed up by 95% of respondents. A key finding of the study is that the crisis prompted a far-reaching rethink of work models and reorganization against a backdrop of remote working. Moreover, the majority sees this as an opportunity for achieving digitalization throughout the company and in HR management, in particular. Therefore, the recommendations for action based on these findings primarily address the topics of leadership and communication, strategic staff planning, including the training of employees on all levels of the company, and the organization of HR itself.

### Aligning management with the New Normal

The decentralization of employees in home offices triggered by the pandemic will undoubtedly continue for some time to come and will, in part, establish itself as the New Normal. This has huge implications for management and requires us to review the current leadership model. Managing employees, building their loyalty to the company while simultaneously intensifying their willingness to work towards achieving the company's goals, all at a distance, is no easy task. Executives need to be aware of these difficulties and coached if necessary, so that they can align their management style with the new conditions. A new form of interaction with employees is required, for example – above all by creating a culture of trust through regular personal discussions.

The successful implementation of a digitalization strategy requires executives to keep middle management regularly and comprehensively informed about the vision, objectives, and measures instigated. Transparency in this process – and opportunities for feedback – are vital so that full support is given to change. In addition, regular reports on the progress made need to be established. Only then can middle management adequately and proactively inform employees about developments and, above all, involve them in the process and win them for the cause, so that they work towards its success.

### Optimizing the communication mix

The process of transformation to the digital world and increased virtual leadership have a direct impact on communication needs between executives and employees. The study suggests that there is still room for improvement in this regard. In general, employees need more opportunities for feedback on whether the frequency, content, and format of communication meet their needs. Furthermore, a key finding of the study is that communication about the organization's digitalization initiatives, their significance, and possible effects, such as newly emerging roles, needs to be even more frequent. Adequate communication relieves fears and strengthens the sense of community as well as the commitment to get involved. It is executives' responsibility to ensure this. The HR department can give this process a significant boost, however, by obtaining feedback from the workforce and passing it on to line managers.

But beware: the fact that companies have more and more communication channels at their disposal must not induce executives to take what they believe is the easy option, such as making unilateral announcements or limiting themselves to simply passing on information. Dialog is preferable to one-sided information, because only feedback that is as direct as possible rules out misunderstandings and communicates people's commitment to others. Information of a general nature can be sent to a wide range of employees via email, intranet, or podcast – this channel is short and means no one will inadvertently be excluded. But for individual topics, especially staffing measures that will impact on employees or induce fear of such an impact, personal discussions are completely irreplaceable.

### Strategic workforce planning is key

Where strategic staff planning is concerned, energy suppliers ought to see digitalization as a welcome opportunity to prove themselves as a modern and attractive employer. For everyone else, it will be considerably more difficult in future to attract talent and retain it over the long term. Qualified and committed specialists and managers are and will remain in short supply. Supporting them in their further development and sustaining their commitment is the existential task of HR personnel – not despite of our emergence into the digital age, but because of it.

## Implications and conclusions

Above all, this means linking the goals of the digitalization strategy with opportunities – both for the company and its employees. The next step is then to translate these goals into concrete tasks for specialists and managers. To empower them, the roles in question and the competencies and skills they require – which the company will need in future – must be redefined and then set down in a concrete skills development plan. The overview below can serve as a guide.

If you believe you can skip this step, be warned: without the right people on board, digitalization projects will miss their target. The development and expansion of networks inside and beyond the industry broaden the knowledge base, especially regarding expected roles and skills.

**Ensuring qualification at all levels**

In the context of digitalization, the role of executives is no longer defined just by their own expertise, but by their ability to create agile, cross-functional teams with diverse

knowledge, and to unite them in the pursuit of success. Executives are therefore increasingly measured on the basis of the professional and personal development of their employees.

This is where HR is needed. It is important to develop alternative concepts and an appropriate culture that allow sufficient time and options for individual and flexible training. There is also a need to expand upskilling programs for supporting professions. All this increases employees' willingness to be more flexible in future. Next to upskilling, the targeted development of internal knowledge management must be promoted in order to secure expertise in the company for tasks that will continue to change in future, and to make this expertise accessible to all employees.

Project example for the identification and development of required competencies



**Making Human Resources a strategic partner**

By planning staffing needs strategically, HR can reinforce the Achilles' heel of digital transformation. To this end, companies must further develop the way their HR department works. Collaboration between HR and the specialist departments can never be too close, because the company's decisions have a direct effect – and usually much faster than expected – on the composition and sensitivities of the workforce. The study suggests that in order to meet this requirement, HR must adapt both its structures and its processes.

The consequences of digitalization on employees must be fully documented and at an early stage to allow HR to react accordingly or, even better, in advance. The most important thing is for management to transfer responsibility for the professional upskilling, sideskilling, and multiskilling of employees to the HR department, and to provide the necessary funds for this. If specialist departments and HR collaborate as partners, this will

ensure that the training needs of individual employees, teams, departments, divisions, right up to highly staffed business units, can be determined precisely and also covered. Based on these joint findings, HR provides the infrastructure necessary for training and develops the appropriate formats for the acquisition of new skills. If employees are in no doubt that their interests are valued and taken into account, they will get behind the digitalization strategy to the best of their ability – if only in their own interests.

For utility companies, in particular, whether in urban centers or spread over a large area, digital transformation requires proactive dialog with other companies within and outside the industry, and with universities, public institutions, and startups. Drawing on others' ideas and wealth of experience is smart and gives digitalization invaluable momentum. Anchoring and advancing the exchange of knowledge throughout the company is another challenge that HR must increasingly address.

Digitalization does not automatically make HR a strategic partner. To be able to fulfill its enlarged and demanding range of tasks in the interests of both management and the workforce, the structures and processes of HR itself must be put to the test. In all probability, HR will also need to reorient itself; roles will have to be redefined and skills prioritized. To make sure new tasks do not disappear in the maelstrom of everyday HR business, they could alternatively be transferred to a competence center, whose employees' sole task is to master the requirements of digitalization: Digital HR@Work.

## Conclusion and outlook

The impact of the COVID-19 crisis has accelerated the pace of digital transformation in utility companies. Those who have taken a strategic approach to the new world of work have stayed ahead. Those who were behind have caught up. According to the study, this is also because companies now understand much more that employees are the key to success and must therefore be given greater priority in digitalization strategies in future.

The results of the study show that energy suppliers have a realistic picture of the challenges facing them. Three out of four companies have already put a digital strategy in place, or are well on their way to doing so. This is indicative of the view that digitalization can only succeed with the help of a shared vision – as well as inspiring ideas about what innovative digital business models and processes could look like.

### Continuous success demands a great deal from companies ...

The overriding goal of management must be to establish and maintain a climate of enthusiasm for change among the workforce. A win-win solution is within reach if employees' skills fit the requirements of the digitalized company and give them the courage to actively help shape a world full of uncertainty and change. What Charles Darwin once said about evolution is now also true of the energy industry: "It is not the strongest of the species that survives, nor the most intelligent, but the one most that is most adaptable to change."<sup>8</sup>

A rethink is required for (1) leadership aligned to the new guiding star of the New Normal, with a growing proportion of virtual tasks. The spatial distance between the leaders and the employees forces (2) new and intensified forms of communication: more frequent, bidirectional and with guaranteed feedback. To accompany this, they need (3) strategic staff planning that removes vague fears of digitalization and transforms them into concrete opportunities for employees. This presupposes (4) the continuous qualification of its own employees, of which HR – in alignment with executives on "What do you need?" – is in charge. Finally, (5) HR becomes a true strategic partner ensuring the success of the company today and in the future. All this will only be possible if it is actively supported by the management.

### ... and can only succeed with employees on board

At a time when digitalization is playing a predominant role, people – with all their emotions, motivation, and fears – are a key factor for entrepreneurial success. Digitalization helps companies to remain competitive, become more efficient, and acquire new markets and distribution channels as well as new customers. But no matter how digital they may be, all companies have people working for them, who all want to be convinced and needed, and are keen to develop new skills. Digital transformation will therefore only be effective in the long term if it is accomplished having employees on board. This is perhaps the biggest change of all. But it is the only path to the future. So let's get started.



# Methodology

The chosen data collection method used a two-stage process: an anonymous online survey combined with a personal survey of selected participants.

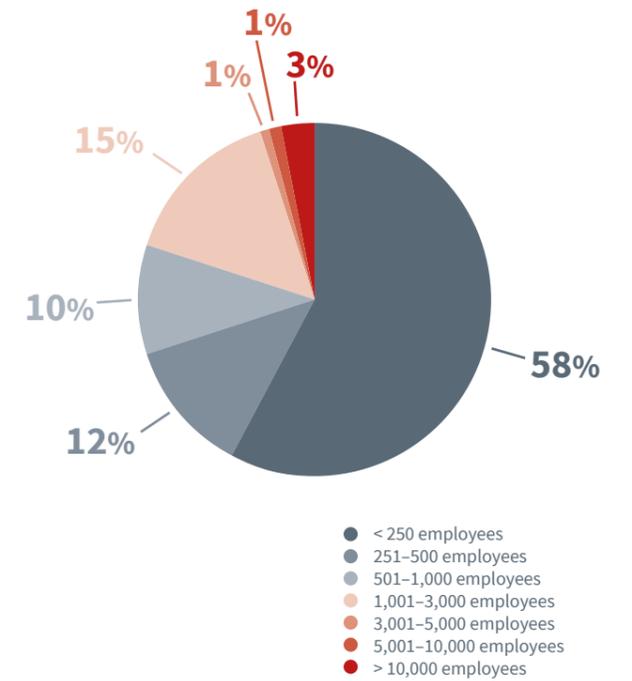
In November and December 2020, directors, HR managers, and supervisors or employees in the digitalization sector of BDEW member companies were asked for their opinion on the future of work in the German energy market. The survey was divided into the areas Strategy and Vision, Key Technologies, Processes and Tasks, Roles and Competencies, Change Management, Upskilling, and HR Organization. Given the global situation, questions were also asked about the role of COVID-19 in relation to changes in the world of work.

A total of 81 companies took part in the online survey. Smaller companies with up to 250 employees were the ones most strongly represented (58%), followed by medium-sized companies (1,001 to 3,000 employees), at 15%. At more than one in two companies surveyed, directors (54%) shared their opinions, and in one quarter of companies, this was done by HR management (26%). This may indicate that the future of work is being treated as a matter of high priority. With regard to the main fields of activity, four out of ten of participating companies stated that they were active in all four areas, i.e., electricity, gas, heat, and water. Almost every organization surveyed covered the electricity and gas sectors. The primary value-added stage was grid operation in half of the participating companies (54%), while for one third of them (33%) it was energy trade.

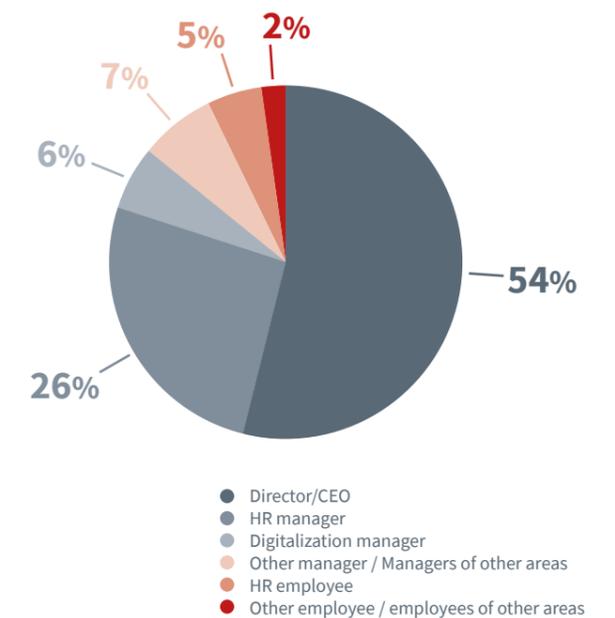
The results of the anonymous online survey were processed by applying descriptive statistics, integrated into the underlying study, and analyzed.

Parallel to the survey, 12 qualitative interviews were also conducted by video call with managing directors in charge of digital transformation. The aim was to gain a deeper understanding of the extent to which technologies are changing the world of work, and what German energy suppliers are already doing today to prepare their employees for the changing requirements. These interviews also focused on the role and responsibilities of HR in shaping the digital transformation. The quotes from the interviews as well as practical examples were additionally included in the study text, in consultation with the company representatives interviewed.

Number of employees in the company

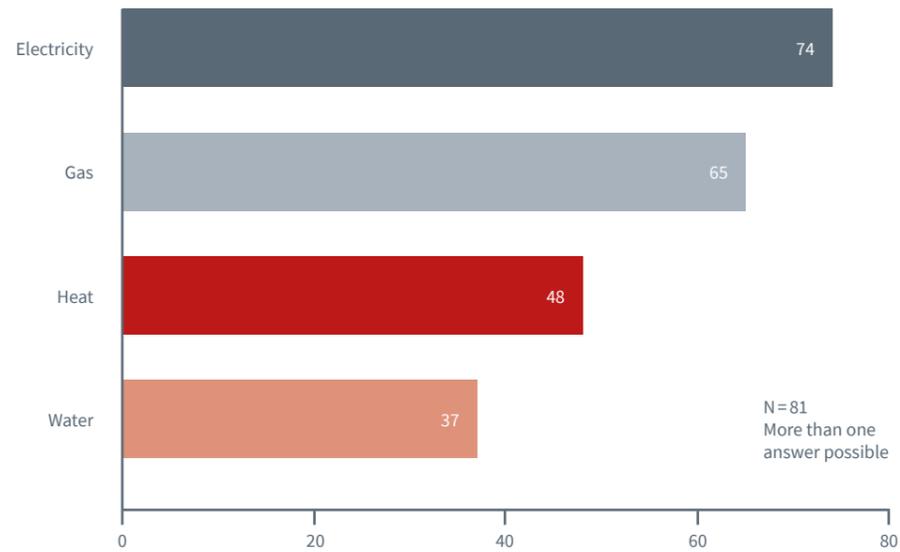


Position of respondents



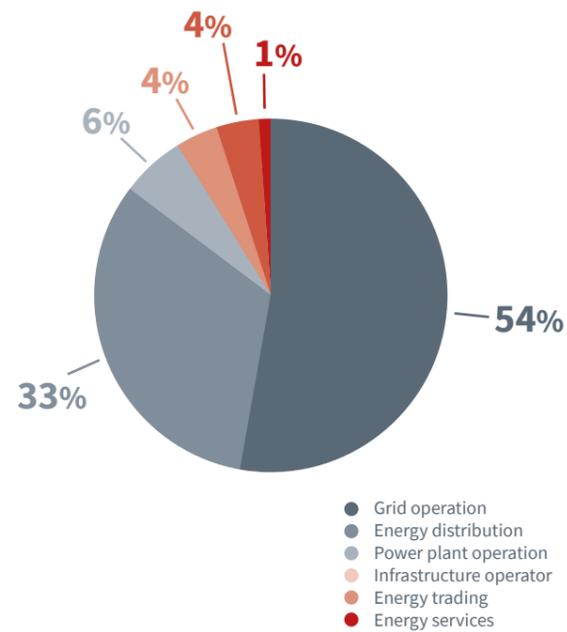
# Appendix

Main areas of activity of companies



We would like to thank everyone who has given us an insight into their digital transformation and the change in the world of work: Mr Armin Arens (HR Director; RWE Aktiengesellschaft), Ms Sylvia Borchering (CHRO and Board Member; 50Hertz Transmission GmbH), Mr Christian Gleimann (CHRO; E.ON SE), Mr Norbert Graefrath (HR Board Member and CHRO; RheinEnergie AG), Ms Heike Heim (Chair of the Management Board; Dortmunder Energie- und Wasserversorgung GmbH [DEW21]), Mr Michael Kamsteeg (Board Member; GASAG AG), Ms Jamina Kleine (Head of Learning & Development and HR Digitization; E.ON SE), Mr Michael Lucke (Director; Allgäuer Überlandwerk GmbH), Mr Hans-Günther Meier (Director of HR and Finance; Stadtwerke Düsseldorf AG), Mr Andreas Niedermaier (Director of HR and Infrastructure; ENTEGA AG), Mr Lutz Platte (HR Manager; Thüga AG), Ms Marion Rövekamp (Director of HR & Law, CHRO at EWE Aktiengesellschaft), Ms Colette Rückert-Hennen (CHRO; EnBW Energie Baden-Württemberg AG), Ms Katja Schmitt-Völsch (Group Communication and Branding; EWE Aktiengesellschaft), and Mr Michael Schmitz (Head of HR Digital; RWE Aktiengesellschaft).

Primary value-added stage of companies surveyed



## Footnotes

- 1 Capgemini Research (2020): Digital Mastery 2020: How Organizations have progressed in their digital transformations over the past two years.
- 2 BDEW, Kearney, IMP3ROVE et al. (2020): Digital@EVU2020: Wo steht die digitale Energiewirtschaft in Deutschland, Österreich und der Schweiz. Study, Berlin 2020.
- 3 Chief Human Resources Officer (CHRO).
- 4 BDEW (2020): Die Digitale Energiewirtschaft: Agenda für Unternehmen und Politik. Study, Berlin 2016.
- 5 BDEW, Kearney, IMP3ROVE et al. (2020): Digital@EVU2020: Wo steht die digitale Energiewirtschaft in Deutschland, Österreich und der Schweiz. Study, Berlin 2020.
- 6 Outplacement – Dismissal of an employee with simultaneous placement in another company or support for further training.
- 7 Ulrich, D. (1997): Human Resource Champions. The Next Agenda for Adding Value and Delivering Results. Boston.
- 8 Charles Darwin (1859): On the Origin of Species, London.

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The German Association of Energy and Water Industries (BDEW), Berlin, and its organizations in the regions represent more than 1,900 companies. Members cover the spectrum of companies from local and municipal to regional and national. They represent around 90% of electricity sales and a good 60% of local and district heating sales, 90% of natural gas sales, over 90% of energy grids, as well as 80% of drinking water supplies and around one third of wastewater disposal in Germany.

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