



# Leading in the context of the industrial revolution

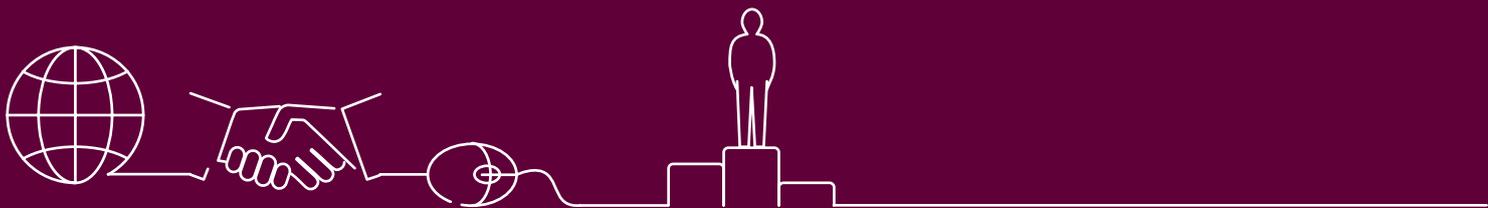
The key role of the Leader 4.0

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# Industry 4.0: The hype has become reality



Disruptive innovations and digital technologies – our industry is in the midst of the fourth industrial revolution. Initiatives that drive this revolution have become known – in particular in Germany – under the term of Industry 4.0. Hardly any global conference, think-tank or exhibition is able to escape the gravitational pull caused by the promise of a new industrial revolution. Not only DAX-listed companies, such as Siemens, but also German small- and medium-sized companies, like the plant manufacturer Eisenmann, have already embraced the potential associated with this revolution. In fact, Siemens presents its successful Industry 4.0 initiatives on a dedicated website, providing evidence that the digitization of production processes and related products has become more than a mere industry hype.<sup>1</sup> Moreover, at

the end of 2015, Eisenmann spun off a software start-up as a stand-alone company. It offers the required information technology and competence to enable integrated production and thus a smart factory in the first place – providing evidence for the global pull towards smart manufacturing.<sup>2</sup>

The technical consequences of Industry 4.0 are distinct: Product development, manufacturing, logistics and even the clients are being intelligently linked by state-of-the-art information and communication technology. Yet, what are the implications of these technological changes for leaders of manufacturing companies? What are the characteristics of the Leader 4.0 who navigates the organization through the fourth industrial revolution,

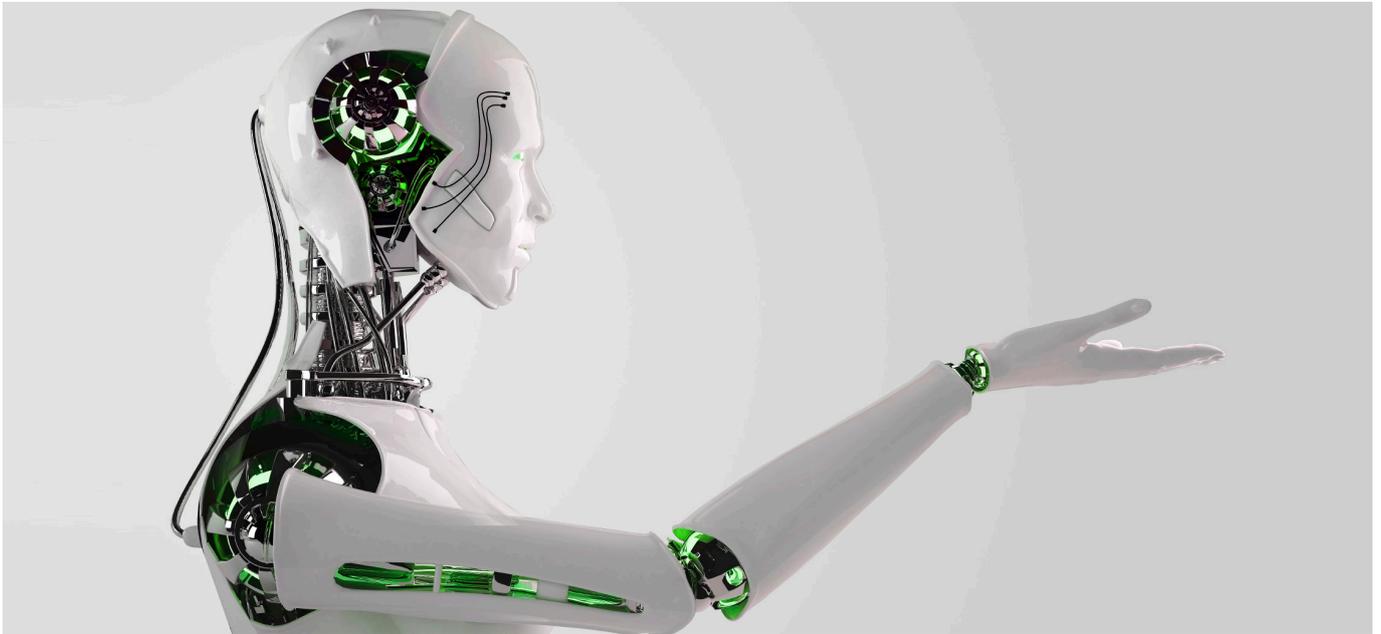
profoundly influencing the success or failure of respective initiatives? Together with researchers and experts from the manufacturing sector, we have investigated the topic of leadership in the context of Industry 4.0. We have assessed how technological progress influences the relationship between managers and their employees. Is the current leadership style still appropriate if the organization is changing profoundly? What type of environment enables leaders to successfully promote Industry 4.0 initiatives? The experts agree: Succeeding in the next industrial era requires manufacturing companies to develop supporting measures that enable their leaders to master the challenges of Industry 4.0.

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1 Website: <http://www.siemens.de/industrie-4.0>

2 Source: [http://www.eisenmann.com/de/medien/presse/presseinformationen/2015/2015\\_09\\_18\\_ENISCO.html](http://www.eisenmann.com/de/medien/presse/presseinformationen/2015/2015_09_18_ENISCO.html)

# A quiet revolution in day-to-day business



Changes triggered by Industry 4.0 initiatives have a decisive impact on every business domain of manufacturing companies. The fusion of the physical and the virtual world into cyber-physical systems makes cross-functional, interdisciplinary projects necessary. As a consequence, the efficiency of traditional hierarchical structures and centralized decision-making in organizations needs to be questioned. Hence, organizational silos will vanish and the importance of digital collaboration models will increase

significantly. The implications will be evident for leaders at all levels, both on the shop-floor – given the increase of man-machine interaction – as well as in central functions, dealing for instance with the strategic evaluation of business insights from a pool of data or with new, data-driven business models. As Industry 4.0 builds on software for collecting, analyzing and managing data, leaders 4.0 will be crucial for promoting IT as business enabler across the value chain. Furthermore, required expertise and technology

skills will have to be identified and integrated, either from other divisions or external sources. New working models will evolve, as production capacities are becoming more and more flexible. Leaders and employees will be required to combine the technical and business aspects by becoming “hybrid” employees to fully embrace the changes triggered by these initiatives – and it needs to be a quick adoption of new routines for the companies to stay ahead of efficient and innovative competitors.

# Smart People – The human dimension of Industry 4.0

Industry 4.0 does not only bring along disruptive changes in production and information processing, but also revolutionizes the daily work of employees on all hierarchical levels. The five “people dimensions” - leadership, new skills and talent, organization, work environment and ways of working - summarize the people-related areas that are most affected in this context and therefore need to receive particular attention when shaping an Industry 4.0 strategy. To put it in a nutshell: The human dimension of “digital” is at least as challenging as the technological one.

## Leadership

Special attention needs to be on **leadership** as widely underrated success factor: Leaders 4.0 will become tomorrow's game changers as they navigate the organization through the 4th industrial revolution by embracing the disruptive changes and encouraging their employees to do the same. They are more than just digital leaders. They need to master various roles,

such as the entrepreneurial, agile, strategic and visionary one. Industry 4.0 requires leaders to understand the superior vision of their business, to think entrepreneurially and to inspire their employees to act in similar ways. On top of that, leaders 4.0 need to focus on shaping their team's trust in new technologies, sensitize them in all questions of data security and take away their fear regarding changing job requirements and even potential job loss. In times of progressive digitization, expert knowledge remains of high importance. However, the success of Industry 4.0 initiatives increasingly depends on other factors besides knowledge, such as communication within the organization or the coordination across different silos. “A change of thinking is required – many things, like the traditional line organization, that have evolved over time and have shaped the leadership style, are becoming obsolete. A fundamental change in thinking is above all necessary for experienced leaders.” says Dr. Frank Eulitz, Head of Base Technology at Siemens Power & Gas.

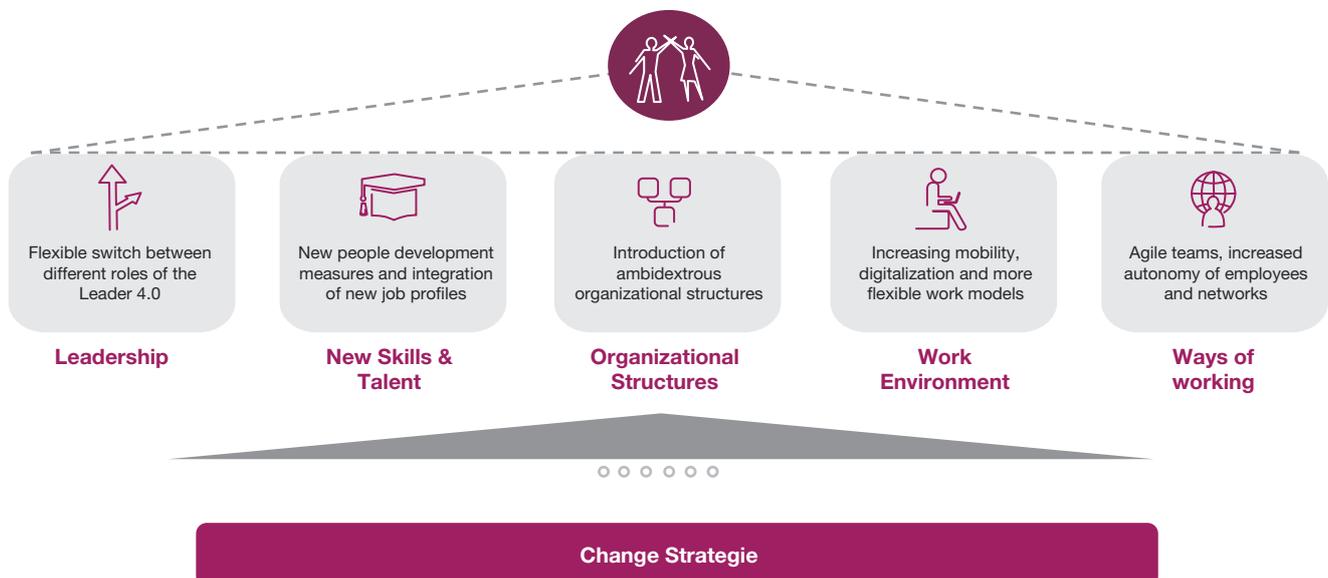
“ A change of thinking is required – many things, [...], that have evolved over time and have shaped the leadership style, are becoming obsolete. ”

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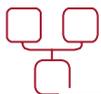
## New skills & talent

On an employee level, Industry 4.0 implies that **new skills and talents** are recruited and developed in existing teams. In some areas, the definition of entirely new job profiles is required. Hence, appropriate recruiting, enabling and retaining of employees are top priorities on the agenda of HR departments. One entirely new job profile is for example the “Industrial Data Engineer” who is responsible for analyzing

Abb. 1: „People Dimensions“ in Industry 4.0



big amounts of data while creating value-added algorithms. In addition to acquiring talents who fit new job roles, existing employees need to be supported in developing new skills. HR and People Development departments face the challenge to merge “two worlds”: The experienced generation, which has in general a lower affinity for digital tools, and the so-called “millennials” or the future “generation edge”, who are more likely to act as innovation drivers, but are dependent on the knowledge of experienced colleagues.



## Organizational structures

Traditional, hierarchical **organizational structures** collide with the growing demand for interdisciplinary and international collaboration to boost corporate innovation. As decision cycles become more flexible, organizations need to reduce pyramidal structures. According to Dr. Ina Graf-Hoffmann, Director of Human Resources Strategy, Talent & Development at Leoni AG, the digital transformation requires “an entirely new type of organization”. Professor Wilfried Sihn, board member of the Institute of Management Science at the Technical University Vienna and Director of Fraunhofer Austria Research, describes this type of organization as follows: “Companies in times of Industry 4.0 look much more like houses composed of decentralized units with their own

decision power, which are supervised from the top.” Furthermore, organizational boundaries vanish due to the rising number of co-operations with external partners, whose expertise will become more and more relevant for manufacturing companies in the future.



## Work environment

Employee mobility and flexibility as well as virtual teams shape today's **work environment**. In times of Industry 4.0, they become utterly inevitable. New digital tools which support information exchange and communication become key in central departments and on shop floor level. Bosch for example has introduced the social media tool “Bosch Connect”. The tool utilizes wikis and digital communities as learning platforms and fosters exchange between employees of different hierarchical levels. “No one would have expected this new transparency to change our organization so much from within”, mentions Lilian Matischok, Head of the project group “Connected Industry” at Bosch Group. At production level, traditional workforce management models need to be adapted towards more flexible planning to exploit the benefits of autonomous, smart machines. This is also in line with the increasing demand of employees for more variable working models to improve their work-life-balance. An app for flexible workforce management is currently being tested as part of a research

“ The digital transformation requires an entirely new type of organization. ”

*Dr. Ina Graf-Hoffmann, Director of Human Resources Strategy, Talent & Development at Leoni AG*

project of the Fraunhofer Institute of Labor Economics and Organization (IAO) at the BorgWarner Ludwigsburg GmbH. This app, KapaflexCy<sup>3</sup>, allows for flexible cross-company planning of production capacities at short notice. It makes it possible to allocate work shifts whenever a customer places an order. Furthermore, employees are included in the decision making process about their working hours by receiving available shifts via their smart phone. After alignment with their colleagues, employees can decide whether or not to accept available shifts with a single click. Dr. Stefan Gerlach of the Fraunhofer IAO explains that KapaflexCy renders the allocation process of employees to a shift by a team lead obsolete and gives more decision power to the employees themselves.

<sup>3</sup> Source: <http://www.kapaflexcy.de>



## Ways of working

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**Ways of working** within project teams are also bound to change as departmental boundaries vanish. In consequence, experts of different backgrounds work cross-functionally in order to solve complex issues. Methods, such as co-creation, allow for the inclusion of various functional areas, customers and experts in the value added process. At the medium-sized enterprise Trumpf, one of the leading manufacturers of tooling machines worldwide, co-creation is already accounted for in the training of new employees. Klaus Bauer, Head of Base Technology, explains: "We do not train single activities such as grinding, milling or similar activities anymore. Instead, our trainees commonly work on projects in interdisciplinary teams and need to find out about necessary product characteristics through direct exchange

with the customer." Partnerships and collaborations fostering idea exchange regarding product development are thus not only important within the organization, but also beyond company borders.

Manufacturing companies have started to realize that for an Industry 4.0 transformation, the people dimensions are key. If Industry 4.0 is the way to go for the manufacturer, the CEO needs to ensure that the right initiatives are covered by the HR and People Development department. Yet how many CEOs have already taken specific actions to initiate the corresponding changes within the company? And how many have also considered ways to support their leaders in advocating these changes to their employees and mobilizing them for implementation?

Industry 4.0 represents a true Digital Transformation for every organization. Thus, it should be tackled in the right way by integrating the human dimension into the overall corporate strategy right from the beginning - this is the only way to turn leaders into smart thinkers and innovative drivers of digital initiatives. They need to communicate the strategy in a credible manner and successfully convey it to their employees to push fundamental changes within the company with the required speed and vigor.



# Leader 4.0 – The role(s) of leaders



This clearly shows the key role that the Leader 4.0 plays in manufacturing companies. Not only does a leader need to identify and adopt technical innovations at an early stage, but also transfer enthusiasm and enable employees to handle the technology. But what are the challenges faced by an experienced manager, i.e. a plant manager, when well-known patterns and structures vanish?

A Leader 4.0 has to think out of the box and act across company boundaries by thinking end-to-end. His subordinates find themselves working in less and less clearly defined departments, distributed across the globe. This is often the case in R&D teams and in networks consisting of internal and external partners. As described by Dr. Ina Graf-Hoffmann of Leoni AG, the promotion of co-operation and feedback culture in virtual, decentralized teams is one of the key challenges for leaders within Leoni AG: "The task faced by many of our managers is in fact not a simple one. This of course depends on factors such as the personality of team members, the tasks, locations and the individual relationships.

Leaders have to learn how to give their staff direction in this new environment, and we support them in this endeavor, for instance by specifically building up virtual leadership skills in management training."

Industry 4.0 adds an entirely new dimension, the dimension of technology, to the relationship between the leader and his staff. The close interrelation between humans and advanced technology raises the question of which type of control is required for self-controlling systems, particularly in terms of autonomy and decision-making authority. The role of humans will be to continuously provide strategic input and to flexibly solve problems. For Leaders 4.0, this entails the successful management of a higher degree of man-machine interaction, both at staff level and also with regard to their own work. This also entails the acknowledgement of increasing limitations of one's own expertise and the willingness to overcome these, for example by integrating specialists in data analysis into one's own team, while building up trust among team members when it comes to data security

“ Leaders need to change the mindset within the company and act as role models. ”

*Prof. Dr. Wilfried Sihm, board member of the Institute of Management Science at the Technical University Vienna and Director of Fraunhofer Austria Research*

and reliability. Moreover, a Leader 4.0 will also act as an agile networker who is able to tap the knowledge available within and even outside the company and make use of it.

The successful implementation of the extensive changes that arise within the scope of a new, digitally oriented corporate strategy primarily requires change leadership and a participatory leadership style. To this end, the leader needs to be capable of adapting to constant change, while at the same time getting the

employees aboard on the journey towards a future that might be difficult to picture. Yet, as the Head of Sales of an international medium-sized heating systems company explains to us, not every leader is already fully aware of the extent of the upcoming changes. Most employees and executives have not yet entirely grasped the topic of Industry 4.0, but are rather focusing on digitization on a smaller scale. The Leader 4.0, however, is living the digital transformation: He acts as an active driver of innovation and serves as a role model when it comes to using new technologies. “Leaders need to change the mindset within the company and act as a role model. The leader shapes the corporate culture. He has to identify the need for change and implement it using a holistic approach. If he fails to do so, Industry 4.0 cannot be successfully implemented only by taking individual measures,” says Prof. Dr. Wilfried Sihm, board member of the Institute of Management Science at the Technical University Vienna and Director of Fraunhofer Austria Research, highlighting the important role of the Leader 4.0 in developing a holistic change strategy. According to the experts, the ability to communicate, enthusiasm and a keen sense for the concerns of their employees are equally important leadership skills for Leaders 4.0. For employees, higher transparency in production means that individual performance and error rates are traceable at all times. They might not be adequate for the complex operation of systems or even fear becoming redundant as automation increases, e.g. through replacement by their “robot colleague”. Through talks with leading manufacturing representatives, some key roles for the “Leader 4.0” have been identified. In the dynamic and

fast-moving context of Industry 4.0, leaders are bound to switch flexibly between these roles in order to shape the right conditions for innovative and interdisciplinary work in their organizations:

As an **entrepreneur within the company**, the Leader 4.0 makes decisions that by far exceed the concerns of his own department. He connects with other departments and develops overall innovative and integrative solutions for products and services and pushes trials and errors of ideas.

The **coordinator of ecosystems** aligns internal and external partners in a flexible manner, delegates tasks based on competencies and builds upon available expertise.

The **talent scout** recruits required talents for interdisciplinary teams, identifies the potential of existing team members and develops them beyond their comfort zone.

As the **coach of agile teams**, the Leader 4.0 responds to changing requirements quickly and flexibly while overseeing the entire value chain and building the foundation for innovations. In doing so, he shows great tolerance for ambiguity, enabling him to identify opportunities, define the corresponding priorities and make decisions in a dynamic environment.

To communicate a vision is no longer enough – the Leader 4.0 becomes a **cultural architect**, shaping the corporate culture and thus deeply entrenching the concept and the requirements of Industry 4.0 in the company and in the minds of the employees.

“Going forward, leadership roles have to be agile.”

*Lilian Matischok, Project Leader for the innovation cluster ‘Connected Industry’ at Bosch*

In the context of Industry 4.0, leaders make a difference like never before when it comes to the successful implementation within the company. It is vital for them to quickly familiarize themselves with their new roles and to be particularly flexible in switching from one role to another as required. All of the interviewed experts, like Lilian Matischok from Bosch, agree: “Going forward, leadership roles have to be agile”. “It is all about getting rid of the old, territorial leadership style. What counts is the company as a whole,” says Rainer Steffl, Chief Information Management Director at the Mondi Group, an international paper and packaging manufacturer.

Nevertheless, new skills and modes of behavior of the Leader 4.0 can only be fully effective if the corporate structures evolve to a similar extent. Changing structures do not only trigger new requirements for executives, but also become a vehicle for the successful implementation of digital initiatives.



# Ambidexterity – From a line hierarchy to a network organization

The conventional, rather rigid corporate organizational structures hardly allow for an agile change between different leadership roles. The key to unfold innovation in companies is the initiation of an ambidextrous organization: In addition to the exploitation of the existing business, leaders must create room for the exploration of innovative processes and business models and achieve a balance between both fields to secure long term success and in some cases even firm survival. One way of approaching this balance is to create internal start-ups or so-called “digital units” consisting of interdisciplinary teams, visionary personalities and own structures. Within the scope of Industry 4.0, this twofold strategic orientation seems to be a fundamental decision enabling the enterprise to lay the foundation for a successful future. In doing so, a company has to explore new business areas (exploration) while excelling at the existing one (exploitation). According to the concept of organizational ambidexterity, this approach can and should be supported by transforming organizational structures.

Yet how do companies in the manufacturing industry face this challenge? What is the impact of the organizational structure when it comes to successfully mastering the challenges of digital change and Industry 4.0? “The conventional organizational model with multiple hierarchical levels will disappear in the context of Industry 4.0,” says Dr. Ina Graf Hoffmann Director Corporate Human Resources Strategy, Talent & Development at Leoni AG. “Connected and systematic thinking has to be promoted. To achieve this, we need to break the silo mentality that prevails in individual business areas“.

Klaus Bauer, Head of Base Technology at Trumpf confirms that rigid structures will soon become a relict of the past: “The

organization has to learn continuously, without any boundaries. Organizational structures have to be adjusted if necessary – above all, since hierarchical and project structures are becoming less and less congruent“. Organizational ambidexterity with its additional strategic focus on the exploration of new business models seems to be the right transitional form for companies in order to anchor radical innovations within the organization and in the minds of the employees. A possible platform for the exploration of innovative ideas might be a start-up that is anchored in the company or a department that is given the explicit task of dealing with new, digital opportunities. This would give leaders the possibility to be much more agile in their required function as Leaders 4.0.

At an international medium-sized heating company, the topic Industry 4.0 and the digital change that comes along with it have already become a key and constant topic on the management’s agenda. The sales representatives of the company, for instance, work with an app that comprises everything from consulting services to spare parts ordering. This enables them to trigger the required process directly when visiting their clients. The fact that digitization is deeply anchored in the organization is an essential success factor. In the company, there is a strong belief that new business models can only be pushed forward when structures are adjusted. At the end of 2014, the company hired a “Chief Digital Officer” who is in charge of the digital units. These dedicated units promote the identification and testing of new business models. They consist of different, interdisciplinary teams with special skills in the field of digitization, e.g. e-commerce, and function as a start-up within the company, in which different areas of expertise are represented: e.g. computer scientists, physicists and business experts. There is a clear division

““ *The organization has to learn continuously, without any boundaries. Organizational structures have to be adjusted if necessary.* ””

*Klaus Bauer, Head of Base Technology at Trumpf*

of competencies but above all, there is no thought control, as the Head of Sales explains to us. The success factors of these units include direct reporting to the board of directors, the dedicated role of the Chief Digital Officer, a straightforward process of decision-making and the networking which allows for constant exchange. Here, the Leader 4.0 has the task of developing and challenging an interdisciplinary team that offers different skills to break through established patterns of thinking, but in particular to promote digital change. The Leader 4.0 is the mobilizing force in the entire transformation process and leverages the digital units to act as an entrepreneur within the company.

Dr. Frank Eulitz, who has taken a leading role for digital initiatives within Base Technology at Siemens Power & Gas considers the adaptation of organizational structures towards a more flexible set-up as key aspect to realize Industry 4.0 initiatives: Additive Manufacturing, Computer Based Simulation, the use of high-performance processors as well as the analysis of comprehensive operating data trigger the need for more flexible business units and currently define his work.

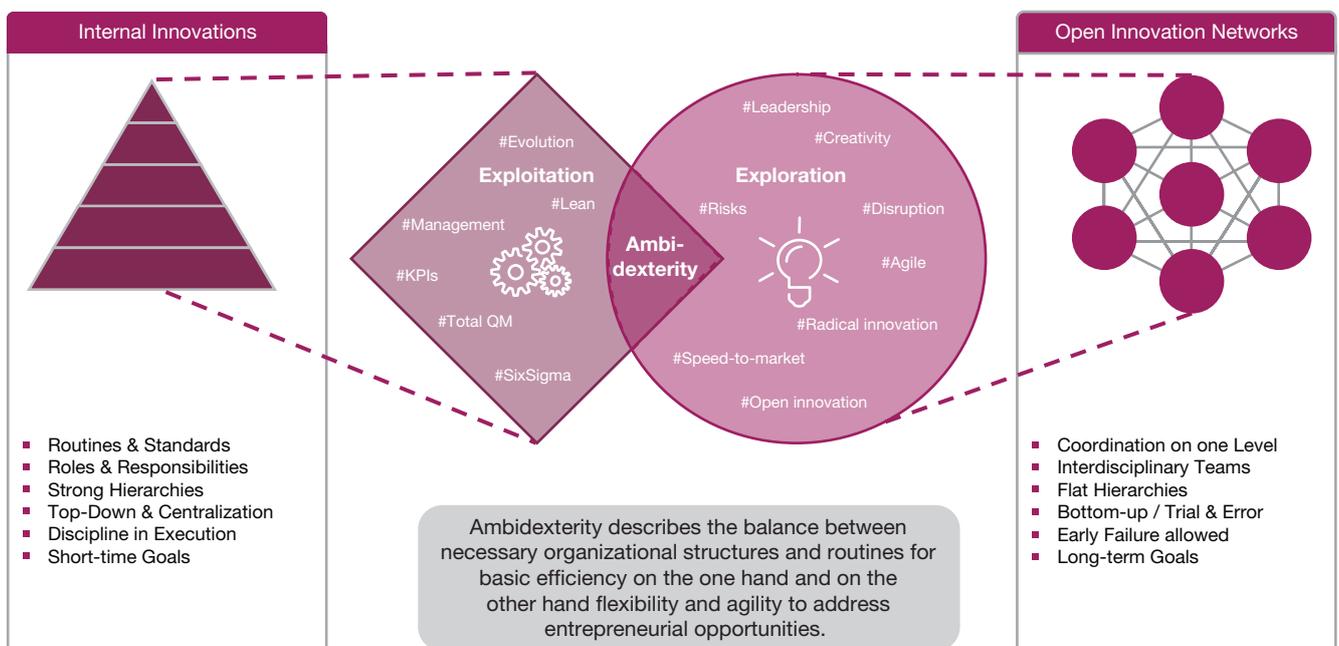
“Siemens is currently working on new organizational structures. The new structures deal with dedicated units that push the business by working in network structures across the whole organization while combining various disciplines. These units combine Data Management and the respective analytical methods with Product Development and boost new developments through an agile way of working”, says Dr. Frank Eulitz, Head of Base Technology at Siemens Power & Gas. Those structures request the Leader 4.0 of whom he has a clear idea: “A leader

that drives the topic of change management, who acts as a change agent and promotes diversity. “The Leader 4.0 supports employees of different disciplines in finding themselves in the matrix structures. He provides strong guidance in an agile environment to successfully deal with rapid changes”. Above all, he considers networks and partnerships as well as co-operations with external companies, suppliers and fast operating start-ups within and outside the company as key success factor for Industry 4.0.

“ The Leader 4.0 supports employees of different disciplines in finding themselves in the matrix structures. He provides strong guidance in an agile environment to successfully deal with rapid changes. ”

Dr. Frank Eulitz, Head of Base Technology at Siemens Power & Gas

Abb. 2: Organizational ambidexterity unites different approaches to innovation



# The right platform – Success factors for a Leader 4.0



When it comes to leadership, it is of course not an entirely new insight that aspects such as flexibility, coordination and entrepreneurship are of major significance. Yet it is a fact that the mentioned requirements for executives are becoming increasingly relevant in light of the complexity of the digital transformation and the necessary changes of organizational structures. Accordingly, they are no longer just optional but compulsory for all companies intending to prevail over their competitors in Industry 4.0 or planning to set new benchmarks in their respective markets. In this context, Professor Wilfried Sihm, board member of the Institute of Management Science at the Technical University Vienna and Director of Fraunhofer Austria Research, emphasizes that in contrast to a conventional executive, the Leader 4.0 is in particular characterized by his openness to embrace change and innovation: “The traditional meaning of leadership won’t change much. However, innovation

management changes: how open are leaders to change? How do leaders recognize opportunities in changes and drive their realization?”. The ambidextrous leader who manages to identify and implement innovative business models while managing day-to-day business is more sought-after than ever before.

If corporate management has recognized this leadership challenge, it will focus on the question of how to best prepare its leaders. Which specific measures should be planned and implemented in the short run in order to support the Leader 4.0 to prepare for the increasingly dynamic work life of Industry 4.0? How can companies develop “change leaders” who are able to convince their employees of the company’s digital vision in a credible way? Organizations which have not yet started to take supportive measures regarding the development of their leaders’ competencies have an urgent need for action.

“ *The traditional meaning of leadership won’t change much. However, innovation management changes: how open are leaders to change? How do leaders recognize opportunities in changes and drive their realization?* ”

*Prof. Dr. Wilfried Sihm, board member of the Institute of Management Science at the Technical University Vienna and Director of Fraunhofer Austria Research*

The range of possible measures is huge. While some international groups have already established entire departments dedicated to the topic of corporate change in the age of Industry 4.0, small and medium-sized companies are partly still in the process of determining the significance of a digital transformation that goes beyond the introduction of data processing systems, tablets and instant messengers. Regardless of their size, all companies should draw attention to the following recommended actions in order to support their leaders in tackling the challenges of Industry 4.0.

**Take a holistic approach to Industry 4.0. Integrate it into your business strategy in order to define a clear vision of the required changes.**

Visioning the whole picture is a crucial success factor, already during the strategy development phase: It needs to include everything from a radically changed IoT architecture to adjusted processes and a type of governance that more than ever requires a clear allocation of roles and tasks. All measures have to be integrated into a holistic, digital-driven business strategy. This is relevant both for initiatives concerning technical changes as well as for the individual employee or leader. The presented “people dimensions” need to be deeply entrenched in the HR strategy, which should be closely tied to the company’s business strategy. This ensures that technical as well as staff-related measures build upon each other to secure the company’s success.

**Make use of knowledge from within and outside your organization.**

Platforms and structures for the exchange of information and the acquisition of specific knowledge have to be established. Internal and external co-operations can be enhanced through live-communities that gather several times per year to deal with specific topics. Targeted partnerships with companies that provide expertise are another promising possibility to increase innovation capacities. Johannes Riha, Management Assistant at GGW Gruber, a Vienna-based sales and service company in the field of measurement and testing technology, on the subject of co-operation: “There are many possibilities to co-operate with external networks and partners. Since our work is determined by cross-company processes, we are currently also considering co-operation models in the field of research.” At present, GGW Gruber & Co GmbH is a co-operation partner of the researchTUb at the Technical University of Vienna. The two parties have established an Industry 4.0 pilot plant to implement research projects and test new developments for future production methods as well as interconnection of plants and automated communication along the value chain.

**Push leadership development in the right direction.**

Another important step is the design and inclusion of new modules into the existing, conventional development programs for leaders. For training courses and coaching

“ There are many possibilities to co-operate with external networks and partners. ”

*Johannes Riha, Management Assistant at GGW Gruber*

sessions, an additional focus should be on digital competencies. Additional modules might deal with topics such as digital engagement or digital governance. The prior includes topics such as conveying a digital vision, implementing change initiatives and mobilizing the staff. The latter focuses on the processes and structures that benefit an effective type of co-operation and innovation in organizations. Further topics that should be considered in trainings include agile project management and value-based leadership. These topics aim at preparing leaders for the increasing demand for team orientation, communication and transparency when interacting with employees as well as for supporting them in motivating their staff.

**Create room for innovations.**

Obviously, it is hardly possible to introduce new organizational forms over night. Insecurities as to whether new structures will indeed lead to the desired success frequently prevail. That’s why such changes should be tested on a smaller scale first, e.g. within the scope of pilot projects. At Bosch, this approach has

already been implemented: “We are trying to generate use cases by implementing pilot projects that we then transfer to a larger scale. When it comes to soft subjects, where the human being is in the center of attention, we take a close look at the pilot flows and pass these on as an offer. We hope to achieve even better results by involving the employees with a participatory approach as opposed to the conventional top-down implementation,” says Lilian Matischok, Head of the project group “Connected Industry” at Bosch Group. Dedicated units are the most consequent implementation of classical “incubation cells” for innovations. They are established in different departments of the company to work on the development of new themes in a transparent way while serving the major components of a strategy geared towards Industry 4.0. This helps

companies to transform into learning organizations that are constantly reinventing themselves and that quickly respond to changes as they arise – or even anticipate them. To this end, two basic requirements are paramount: First, interdisciplinary teams to combine all the required skills. These teams should consist of predominantly visionary personalities with a strong ability to put ideas into action. Second, clear responsibilities and short reporting lines are required to provide employees with the necessary ability to act and make decisions. In order to establish a consistent framework for these activities, companies should develop incentive systems that put the corporate goal above division-specific or personal objectives and that focus on project outcomes instead. Suitable employee incentives are also important to foster the

consistent generation of new innovations. The course for such adjustments of corporate structures can only be set by the management board.

In many companies, the fourth industrial revolution triggers fundamental decisions when it comes to a strategy for the future. When defining an Industry 4.0 strategy, the challenge of a business transformation has top priority, i.e. how to adapt the corporate culture, systems, processes and organization to reach the goal of a more digital company. Involving the organization from the beginning is the right step to successfully tackle a revolution such as Industry 4.0 – headed by the Leader 4.0.

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