we are IntechOpen, the world's leading publisher of Open Access books Built by scientists, for scientists



122,000

135M



Our authors are among the

TOP 1%





WEB OF SCIENCE

Selection of our books indexed in the Book Citation Index in Web of Science™ Core Collection (BKCI)

Interested in publishing with us? Contact book.department@intechopen.com

Numbers displayed above are based on latest data collected. For more information visit www.intechopen.com



Chapter

Implementation of a Digital Workplace Strategy to Drive Behavior Change and Improve Competencies

Ileana Hamburg

Abstract

Digital technologies are integrated in many aspects of life and work and present benefits and challenge for organizations, employers, and employees. In order to have advantages from digital transformation, organizations should be creative for new working environments and their culture around digital developments in the workplace in order not to lose clients, productivity, and employees. Some keys of success of digital workplaces are an effective implementation of a digital workplace strategy with a changed learning and culture as an incentive for staff behavior. This should suit to technological solutions and support its adoption and use it for work, communication, and cooperation. Entrepreneurship education should be also adapted to digital transformation in order to prepare employees and employers for digital workplaces.

This chapter presents besides some aspects like a digital European workplace initiative and a framework, which could be the basis of a digital workplace strategy, some proposals for improving entrepreneur's skills. As an important issue of a digital workplace strategy is a suitable learning concept to foster a digital culture and employees' behavior which can be integrated into entrepreneurship education and training programs in order to prepare entrepreneurs for the digital transformation and digital workplaces. The author works in many European projects aimed to improving work and education/training of entrepreneurs in digital era and included in this chapter issues necessary for small- and medium-sized companies (SMEs) resulted from surveys done within some of these projects about SMEs' problems that have in connection with digital transformation and of organized training.

Keywords: digital transformation, digital workplace, digital workplace strategy, culture, behavior, entrepreneurship, SME

1. Introduction

The increasing integration of digital technologies in all aspects of our lives is both a benefit and a challenge for organizations, employers, and employees.

Organizations are benefiting from such digital transformation including also digitization of the workplace, i.e., through increased productivity, cost savings, a more mobile and agile workforce, increased flexibility, and adaptability in marketplace. Enterprises are collaborating more globally and with more diverse and global staff. Employees could work from anywhere and stay connected through smartphones, collaborate with peers, and stay on top of digital trends. Organizations should be proactive in creating new systems and policies and rethinking their culture around digital developments in the workplace in order not to lose clients, productivity, and employees.

The keys of success of digital workplaces are an effective implementation of a digital workplace strategy with a changed learning and culture. Culture is an incentive for behavior; organizations and managers should assure that staff behavior suits to technological solutions, supports its adoption, and uses it for work, communication, and cooperation. Entrepreneurship education should be also adapted to digital transformation in order to prepare employees and employers for digital workplaces.

This chapter presents besides some aspects like a digital European workplace initiative and a framework, which could be the basis of a digital workplace strategy, some proposals for improving entrepreneurship skills. As an important issue of a digital workplace strategy is a suitable learning concept to foster a digital culture and employees' behavior which can be integrated into entrepreneurship education and training programs.

The role of entrepreneurs and of entrepreneurship education and how it will be changed in order to prepare entrepreneurs for the digital transformation and digital workplaces are shortly presented.

The scope of this chapter is on one hand to discuss with academics who work in the field of digital transformation and with students to find new scientific methods for problems like cultural and behavior change; on the other hand, the author has experience in learning methods for entrepreneurs and would like to help organizations and employees particularly in SMEs to achieve skills and competences for a successful digital transformation and digital workplace results.

The author works in many European projects aimed to improving work and education/training of entrepreneurs in digital era and included in this chapter issues necessary for small- and medium-sized companies (SMEs) resulted from surveys done within some of these projects about SMEs' problems that have in connection with digital transformation and of organized training. The author works currently at the planned training modules and will organize training sessions with SMEs from Germany within the current European project Reinnovate.

We think the problems discussed in this chapter will be used also within the German initiative Mittelstand 4.0-Kompetenzzentrum standards which supports companies and staff within digital changes. The author discussed with some companies within this program about changing culture and staff behavior within digital workplaces and how to improve entrepreneurs' digital skills.

2. Digital transformation

It is known that the development and proliferation of information and communication technology changed the ways in which employees connect, collaborate, and communicate.

These changes have been accelerated also due to trends like:

- Aging workforce and the need to capture their knowledge;
- Necessity to meet the varying needs of a multi-generational workforce;
- Information overloaded and technology helping employees to find what they need to work faster.

These trends require a digital transformation and a reshaping of work environment.

Digital transformation can be understood as improved business processes through digital technology. It means better collaboration between staff, efficient collaboration with customers, stronger and more productive relationships with partners, and increased potential by changing work styles.

The main drivers of digital transformation include traditional digital technologies [1, 2], i.e., infrastructures (i.e., networks, computer hardware) and applications (i.e., apps on smartphones, web applications), and the digital exploitation potentials [2], i.e., possible digital business models and digital value creation networks.

In the narrower sense, digital transformation often refers to the change process within a company triggered by digital technologies and customer expectations. However, it is a process of change affecting a variety of aspects of our society and does not end up in companies [3].

Digital transformation in organizations happens in many ways; employees and employers have different hopes [4]:

Managers want:

- that their employees work together more effectively to boost productivity;
- that their clients are content and to gain new ones through better customer service;
- to use digital technologies to minimize costs;
- to improve business processes;
- to be better than their competitors;
- to use digital transformation to remain relevant in the face of the quickening pace of technology advances.

Employees would like:

- to work with digital toolsets according to their tasks, experience, and working style;
- to have workspaces making possible to collaborate more effectively within their jobs and also due demands to increase productivity and cut costs, making it harder for employees;
- to be helped to meet market expectations.

Achieving such goals can be a long and difficult process because digital technology and change management issues influence workplace transformation. Developing and working on a digital workplace strategy can challenge the most forward thinking of business leaders.

There are big differences between organizations referring their digital transformation initiatives:

- Some of them develop some strategy and understand the benefits.
- Others are still in the early stages of developing a plan not knowing valuable ways about how to go about defining their goals for a digital transformation.

3. What is a digital workplace?

The emerging digital workplace, considered the natural evolution of the workplace, can address issues listed above and helping organizations [5, 6].

The digital workplace includes all digital technologies and services people use to get work in today's workplace—both which already exist and ones to be implemented. It ranges from HR applications and core business applications to e-mail, instant messaging, and enterprise social media tools and virtual meeting tools.

Frank Schönefeld defines the digital workplace as the "totality of the required access infrastructure, applications and device platforms of information or knowledge workers who need them to perform their work tasks and engage in collaboration" [7]. Digital workplaces could:

- support changes in working styles enabling employees to work more transparently and better use social networks.
- unify offline and online communications by keeping employees connected through their mobile devices to provide anywhere, anytime access to tools and corporate information.
- focus on employee experience by providing them with user experience they have outside the firewall. They provide choice, flexibility, and personalization.
- support virtual work environments that allow employees to stay connected in distributed and virtualized work locations while balancing customer privacy and operational risk.
- minimize spending and enhance productivity by providing employees with the right tools and right information at the right time.
- win the war on talent by offering the progressive and innovative environments that top candidates now [8].
- Digital workplace as a portal is "a solution for the integration of information and services in a common user interface" [9] because different services and components are combined in one user interface and made available to the user mostly web-based.

Integrated data can be used via interfaces in different applications. Users can combine existing data and create new applications based on it.

The conception and deployment of the workplace are among the key strategic activities for the European Commission in the years to come. The digital workplace initiative is also an important part of the ICT chapter of the 2016 Synergies and Efficiency Review.

The digital workplace initiative will provide staff with the right IT tools, platforms, and services, enabling users to work and collaborate anywhere, anytime with a fit-for-purpose security and optimizing their work experience and productivity. It will be adaptive and flexible to incorporate different types of users, new behaviors, and new technologies [10].

Within the conceptual framework underpinning the digital workplace initiative in the Commission staff is at the center, with a particular focus on the excellence of user experience. A staff member should be able to connect anywhere and at any time, through simple and secure authentication mechanism, on a variety of mobile

devices to a number of corporate services. The data will be stored on a hybrid cloud model, ranging from on-premise (European Commission Datacenters) to public clouds depending on the classification of the data [10].

The six strands of the digital workplace initiative are:

- A balanced mix of mobile devices, either corporate or BYOD, allowing connection from anywhere and at any time. There are constraints about using corporate tools on private devices and vice versa, but they may be resolved with a good compromise between usability and security.
- Office automation comprising supported operating systems, word processors, spreadsheets, presentation-authoring tools, access to files, etc. An architecture enabling hybrid services become progressively more important especially when the mobile dimension perspective is incorporated.
- Mail and calendaring, including the central role of e-mail and its tight integration with calendar tools as a way to send messages, share information, and manage time and meetings.
- Unified communication encompasses different sources of real and near-realtime communication, which include videoconferencing and the future of telephony (telephony becomes an app, the classical telephone is replaced by the single mobile device).
- Collaboration and social networking, covering the main aspects of collaboration (from document to tasks), communities, and social networking, with special attention on their right availability, security, and integration in mobile platforms. Fast access to the relevant information is an essential in the digital workplace. Therefore information management and corporate search, as very strong integration elements, will be part of this component.
- Integration and identity and access management. The future digital workplace will be based on a hybrid platform with a combination of on-premise and cloud-based solutions to take the maximum benefit of technology development and to allow mobility.

By implementing the digital workplace initiative in the European Commission, it is intended to realize the following objectives:

- Increase staff engagement. Engage employees and raise motivation through an effective, efficient digital workplace.
- Increase staff productivity. Allow productivity improvements by providing the most suitable and effective digital workplace to each staff member.
- Enable a more modern and efficient office space design.
- Staff from many organizations already use many of digital components, i.e., responding to e-mails from smartphones, checking their paying online, or digitally enter a sales opportunity, so that organizations do not have to build the digital workplace from the ground up.

In the next years, the workplace continues to evolve, and employee expectations shift so that organizations that do not embrace digital workplace risk falling behind [10].

4. Digital workplace strategy

The key of success of digital workplaces lies in an effective implementation of a digital workplace strategy, and the first step in this transformation strategy is a cultural change supported by learning measures.

Digital workplace strategy can be understood as the dynamic alignment of an organization's work patterns within the digital work environment to enable peak performance and reduce costs. As each workplace strategy, a digital one supports to fulfill business objectives such as reducing property costs, improving business performance, merging two or more organizations/cultures, and relocating or consolidating occupied buildings. The workplace strategy and its implementation quite often occur at an opportune moment such as a property lease break or a company merger or acquisition [4, 11].

Some special reasons to build and adopt a digital workplace strategy could be the following [4, 12, 13, 14]:

- Talent attraction: many employees would opt for a lower paying job if they could work out of office, i.e., at home.
- Employee productivity can increase through online social networks.
- Employee satisfaction can be higher by installing and using social media tools internally.
- Employee retention is more stable when employee engagement increases.
- Newer communication tools, particularly instant messaging, are preferred over more traditional ones like e-mail or team workspaces.

Many organizations are convinced about the importance of a digital workplace strategy and invest money in supporting digital workplace strategies that promise ROI. Sure, to support these outcomes, you need to assure for employee's tools they need to collaborate, communicate, and connect with each other. Clear road maps should be created to ensure digital workplace with measurable business, deliverable, and minimal risks.

Business drivers for building a digital workplace strategy are:

- Rapid technology change is enabling a different workplace and work; some examples are artificial intelligence (AI) and big data combined with increasingly available collaboration tools.
- Employees' expectations of a different workplace experience supported by ubiquitous connectivity and rapidly advancing social technologies.
- Citizens demand digital service delivery and a different relationship with the government: There is clear citizen demand for quality online services to match their experiences with other service providers. This requires a digital-first workplace to work effectively.
- Often workplace strategies are developed by specialist workplace consultants, or by an architectural practice. "The successful implementation of a workplace strategy requires an interdisciplinary team, internal and external to the

organization. A workplace consultant may be retained to engage the team, help define success criteria, manage the process, and assess results" [13].

• External workplace consultants are professionals from a number of backgrounds: business management, interior design and architecture, building surveying, real estate and facility management, human resources, and building research.

In the file [8], a proposal for a digital workplace framework is presented with the following layers:

4.1 Collaborate, communicate, and connect

The employees should be able to do their job by using digital technologies for collaborating, communicating, and connecting with others. Productive business relationships can be created within and beyond natural work groups and enable knowledge sharing across the organization. In the next part, we develop this issue.

4.2 Technology: the digital toolbox

Each organization already has a digital workplace toolbox with different tools to support digital workplace in different ways. It is necessary to adopt the right tools for employees to do their jobs. The digital workplace toolbox can be defined in categories to support the ways in which you communicate, collaborate, connect, and deliver day-to-day services. Often the development of digital tools does not follow a digital workplace strategy where the business focus is clearly defined. Organization culture should be also considered.

4.3 Control: governance, risk, and compliance

Some components of digital workplace governance are:

- Guiding principles: identify the business goals to be achieved with the digital workplace, and translate them into guiding principles to drive ongoing development.
- Information governance strategy: determine the focus of digital workplace strategy, and align it with organization's existing information management or information governance strategy.
- Roles and responsibilities: identify key stakeholders, and create a suitable and sustainable interaction model.
- Training and certification: ensure employees have access to training to be prepared to have advantages of digital developments.
- Policy training: in addition to technical training, employees need policy training.
- Orchestrated presence: by organizing channels within the digital workplace.
- Crisis management: if a crisis occurs, react quickly (within the first day).

4.4 Business drivers: measurable business value

To deliver the necessary benefits, an organization should guide the direction of digital workplace development.

Some ways to achieve measurable value:

• Increase revenue.

• Reduce operational costs by introducing more effective ways to meet virtually, cutting travel and telecommunication costs and eliminating wasted time at the airport.

• Accelerate time-to-market by using tools to support research and develop, test, and deliver new products and services more quickly.

- Enhance innovation.
- Improve the customer experience.
- Increase agility and flexibility: provide the tools that mimic organization and business changes and reflect employee behaviors.
- Heighten staff satisfaction, i.e., by implementing easy-to-use tools.
- Strengthen talent recruitment and retention.
- Improve employee experience.

5. Cultural change and behavior supporting digital transformation

One of the first steps in the digital transformation is a cultural change in organizations. Culture is an incentive for behavior; organizations and managers should assure overcoming a culture of learned helplessness and spoon-fed training to encourage ongoing personal learning so that staff behavior suits to technological solutions, supports its adoption, and uses it for work, communication, and cooperation. One important issue of the digital workplace strategy is a clear understanding between organizational culture and technology, and this can be achieved within an adequate learning strategy. It ensures that tools, processes, and systems realize their full potential and will not be a failed initiative.

Organization's culture influences the way employees behave and work within digital transformation and so organizational performance, success, and failure. This means employee's culture ultimately determines how and to what extent employees connect, communicate, and collaborate within digital workplaces.

It is important to develop a change management plan and that the digital workplace strategy aligns to organization working culture. This cultural change and suitable technological components can contribute to improve:

• Collaboration by integrating intuitive, easy-to-use collaboration tools that enhance employees' ability to work together and support their own working style and wishes

- Communication by using digital tools to create their own content, rather than simply consuming existing content, to support that right information reaches the right audience, bilateral communication, and personalization of content
- Connections across the organization and outside

The free flow of information at the digital workplace has a positive impact on agility and innovation of organizations, and it promotes employee engagement and satisfaction by delivering the right information to the right people at the right time. One problem is how managers/leaders in organization can influence employee's behaviors and practice changes, conducting to innovative products and services that will enable the transition from old business models to ones successful in a digital world.

Isaac Sacolick presents three ways to enable employees to participate more in digital programs [15].

5.1 Encourage people to ask questions

Determining possible employees to ask questions enables them to move away from "the way we always do" to discussions what is better to do in digital working places.

That is, operations team wants to explore using automation to eliminate repetitive discussions. Someone asks, "How can we learn to be product owners in its agile development process?"

Sure, there are some people in the organization wishing to do things in the old way. Asking questions is an approach, which can open a dialog about new solutions.

5.2 Get out of the office and meet customers and prospects

Customers expect to select products and services intelligent and valuable. Start-ups and market leaders in other categories can steal market share from slow competitors not being in contact with customers but have also opportunities to develop new services into new areas by identifying optimal customer segments to deliver services digitally.

Leaders/representatives from organization should go out of the office, learn from customers, take into consideration their needs, and develop a perspective on how to deliver new experiences. Marketing specialists should learn how to best message and target prospects. Sales should be learning whom their new competitors are and how to defend against sales objections. Technologists should learn about the underlying technical capabilities required to fulfill value propositions.

5.3 Ask for data, then insights, then opinions

A data-driven organization offers practices and tools for people to present a thesis—first presenting data that backs it, then insights they have inferred, and lastly their opinions and conclusions. Behaviors drive organizational change.

Employees' roles in the organization, their jobs, and how they deliver business value are all subject to be changed in digital transformation, in order to convince more employees to support the digital strategy by challenging the status quo, to learn what customers need today, and to use data efficiently to drive bottom-up and top-down decisions.

5.4 Adaptation of employees to digital transformation and digital workplaces

When an organization suffers changes in everyday functioning like digital transformation, both employers and employees must face challenges; if employees do not keep up, chances that transformation to be successful are very low.

In the following experts, make some proposals to help employees to adapt to digital transformation [16].

5.5 Open dialogue

It is known that employees are sometimes resistant to change when the transformation comes only from up, so it is important to create a dialog with employees to discuss which and how they see improvements in digital transformation. If it is possible, the open dialog should start from the top and involve all employee's transformation. One leader in organizing digital transformation should bridge the gap between the actual implementation of technology and the workplace culture and demands.

5.6 Invest in training

"Let people understand the reasons for the change, and make sure they have a clear picture of what will improve when they get there," says Dr. Daniel Cable, professor and chair of organizational behavior, at London Business School. It is important to foster a culture of change and make sure employees develop the skills to keep up with a fast paced and dynamic environment. All employees should be encouraged to go through the company-training program to drive adoption.

5.7 Foster a culture where experimentation is allowed and encouraged

First employees can freely experiment without fearing the consequences of mistakes. Often, they discover new and faster ways of doing everyday tasks, increasing efficiency and productivity.

5.8 Support collaboration

Online and offline communication can easily be unified keeping employees connected through their own devices. Digital connections often reach down generational gaps and bring employees of different ages together. New digital communication fosters collaboration in departments and across the organization. The digital transformation should not be felt only as technology change but more like intuitive ways to complete tasks.

5.9 Involve employees

Embracing digital transformation is more easily achieved through increased employee engagement. Using digital technologies employees can reach consumers easily and directly.

Often, older employees are not enthusiastic about digital transformations, but their insight, wisdom, and experience are invaluable. By improving internal employee engagement, employees can feel more valued and are more open to change. Engagement drives adoption, but digital transformation too can drive engagement. Flexible work has positive effects on employee engagement. In the digital age, flexibility is easier than ever to implement. Employees can work

remotely, use their own devices, and utilize digital tools to interact impactful with consumers and each other. Tangible benefits of digital transformations are easier to be evaluated.

6. Learning, training, and entrepreneurship education

A key success factor in digital transformation of an organization is a training and learning concept with three areas of focus [17]:

- how an organization bridges its digital skills and confidence gaps
- how an organization encourages people to take responsibility for their own continuous learning
- how an organization challenges and supports its senior people to become digital leaders

Some years ago, learning was focused on training people to fulfill their tasks (job training) and occasional additional skills, and there was little need for most workers to be always learning. Now, when all organizations must cope with the uncertainty, complexity, and ambiguity of the digital economy, they have to try to become more agile and adaptive. Intelligence and small-scale decision-making must be distributed to the edges of the organization, so that each team and function is free to learn and adapt based on customer and market feedback [17].

The learning process in organizations wishing to be successful within digital transformation should be changed from a process-centric world of job training to a service-oriented world of continuous learning and improvement in the flow of work. Many organizations developed digital workplace platforms and tools; learning around the digital workplace should help employees to understand how these tools can improve their work, achieve digital skills, and help the organization to have more advantages from its existing technology investments.

Some aspects should characterize the learning in the time of digital transformation [17]:

- The digital workplace needs a learning hub/community to accelerate change and adoption of new ways of working.
- A combination of informal, active, social learning + digital guides and a suitable methodology is a good approach to this.
- Minimum digital fluency is required to work in modern organizations.
- Leadership development programs need to change to avoid the behavior of some senior people becoming the biggest barrier to change.
- In the modern technology-augmented organization, learning will not be a separate activity, but a daily part of work with occasional focused learning on new specialist skills.

Referring to necessary skills of entrepreneurs to work within digital workplaces, the European Union team underlines team working, communication, entrepreneurship and innovation, and intercultural skills as as "necessary to drive creativity and innovation and cope with complexity and uncertainty in a fast-evolving workplace" [18, 19] and new skills for success at macrolevel, i.e., digital fluency referring to the ability to use digital tools and resources existing in companies to do a specific task at workplace and be successful. Another skill is the ability to deal with a change which significantly increases. Adaptability and cognitive flexibility help people to change the way when business needs shift.

It is known that information and data are used more frequently to achieve business goals, to make decisions, and to build strategies. The entrepreneurs should be able to asses and analyze data and information.

The EntreComp framework [20] outlined by the EU Commission, 2016, highlights that entrepreneurship should not be limited to those people setting up businesses but in all aspects of life. "Entrepreneurship is when you act upon opportunities and ideas and transform them into value for others. The value that is created can be financial, cultural, or social" [21].

Entrepreneurship requires innovation, knowledge about industry/market, and adaptability to different business. In order to be prepared for a successful career, it is necessary that students understand what means entrepreneurship and use entrepreneurial skills to achieve career goals.

Entrepreneurship education and training refers to the use of a variety of skills to develop a culture of entrepreneurship [21] aimed at the development of behavior, attitudes, and capacities that create value.

Entrepreneurship and entrepreneurship education have an important role in social and economic developments.

Addressing a global challenge such as youth employment requires global actions to prepare them for digital workplaces. It is known that young people are natives of the digital realm, relatively few possess the skills needed in the digital economy, and employers around the world are struggling to find skilled professionals equipped with the technical and soft skills they desire. In context of youth employment crisis and the job opportunities available for people equipped with digital skills, the question of skills training and improvement of entrepreneurship education therefore become central.

Referring learning methods within entrepreneurship education, Chinnoye and Akinlabi [22] affirm that this is most successful through active learning approaches such as experiential, team-based project, and problem-based approaches.

Learning the concept of global citizenship through global collaboration helps students to work cooperatively with people around the world; this is often necessary for their future jobs.

Small- and medium-sized enterprises (SMEs) are very important and numerous in Europe but small, and their resources are constrained. Because, their staffs need to adapt to digital transformation changes and learn new competences and skills relatively quickly; new learning/training opportunities for their staff have to be found, in addition to the daily operations of the company. Most entrepreneurship programs are targeted at new business owners or start-ups. There is, however, less research on the relationship between entrepreneurial skills of employees in existing SMEs, digital transformation, and innovation capacities in this context.

The European ongoing project Reinnovate with participation of the author focusses also on encouraging all employees in SMEs to develop an entrepreneurial mindset, increasing the chances of the small firm's survival within digital transformation. Project partners come from five European countries (www.iat.eu). Within the framework of the project, an intense cooperation with SMEs, research organizations, and representatives of higher education is crucial. The provision of a training program and model accreditation will assist employees in SMEs to find/create the knowledge required to become more competitive, to develop a digital culture of entrepreneurship, and to become more innovative.

Reinnovate uses results of the European project Archimedes and a survey with 150 European SMEs about their existing skills and corresponding training needs suitable also in connection with digital transformation. The methodology of Reinnovate is direct including interviews with guest entrepreneurs, recording videos, counseling, if possible, group discussions, active learning, learning from mistakes, process-oriented teaching, practical-operational teaching methods like starting a business, and role play [23].

The Reinnovate methodology should help to:

• Take into consideration the most common practices in SMEs which are informal learning and workplace learning.

- Take into consideration effective and preferred practices by employees to keep the employees moral at digital workplaces and extend their employability perspectives.
- Support the interorganizational level of workplace learning, i.e., regardless of life-cycle stages.

Four training modules will be developed and offered to SME staff, each module over the course of a 6 week period; if a learner takes all four modules, they will accumulate credits for a level 7 certificate award.

Module 1 about how to use workplace-oriented research to identify opportunities for new business includes also identifying opportunities from national and international perspective referring digital transformation, social, and cultural problems.

Module 2 has the objective to enable learners to gather and analyze the relevant data to allow them to implement a business opportunity or an innovative idea in connection with digital transformation. The module consists of three units, decision-making, gather data, and assess information.

Module 3 helps entrepreneurs to manage an own research project and module 4 to evaluate success and feature opportunities.

7. Conclusions

There is a consensus between researchers, educators, business observers, and entrepreneurs that digital transformation requires many changes, i.e., cultural and behavioral ones, and that entrepreneurship education and training could significantly increase the number and the quality of entrepreneurs working in SMEs or entering the digital economy.

This chapter has involved a review of different articles, the opinion of some practitioners, SMEs, and of the authors about how could be companies helped to solve some problems in connection with digital transformation.

Finally, it has been established that it is not easy to scale up business from a traditional small enterprise to one working successful in digital era; through new educational practices and a cooperation between educators, research, and industry entrepreneurial mindsets can be supported including behavioral changes and achieving competences like described in EntreComp and also new work-oriented research skills.

The program being developed within the Reinnovate project to develop entrepreneurial culture in SMEs through the provision of a suitable training program can contribute in this context. The author will work further in collaboration with SMEs to make some adjustments toward transformational entrepreneurship and a sustainable socioeconomic development of SMEs in the digital era.

Acknowledgements

This paper describes work within the ongoing Erasmus + project Reinnovate.



IntechOpen

Author details

Ileana Hamburg Institut Arbeit und Technik, WH Gelsenkirchen, Gelsenkirchen, Germany

*Address all correspondence to: hamburg@iat.eu

IntechOpen

© 2019 The Author(s). Licensee IntechOpen. This chapter is distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/3.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

References

[1] Foegen M, Kaczmarek C. Organisation in einer digitalen Zeit: Ein Buch für die Gestaltung von reaktionsfähigen und schlanken Organisationen mit Hilfe von Scales Agile & Lean Mustern. Darmstadt: wibas GmbH; 2016

[2] Gassmann O. Digitale
 Transformation im Unternehmen
 gestalten: Geschäftsmodelle
 Erfolgsfaktoren Fallstudien
 Handlungsanweisungen. München:
 Hanser; 2016

[3] Keese C. Silicon Germany: Wie Wir Die Digitale Transformation Schaffen. Albrecht Knaus Verlag: München; 2016. ISBN 978-3-8135-0734-8

[4] Hoffmeister C, Yorck von B. Think New! 22 Erfolgsstrategien im digitalen Business. München: Carl Hanser Verlag; 2015. ISBN 978-3-446-44228-3

[5] Kruse P, Geißler P. Das vernetzte
Unternehmen: Wie der Digital
Workplace unsere Zusammenarbeit neu gestaltet. Norderstedt: BoD–Books on
Demand; 2015. ISBN 978-3-7392-9620-3

[6] Menkens S. Beim Homeoffice ist Deutschland noch Entwicklungsland. Welt Online; 2016. https://www.welt.de/ print/die_welt/politik/article155662124/ Beim-Homeoffice-ist-Deutschlandnoch-Entwicklungsland.html

[7] Schönefeld F. Social intranet—The new role of the intranet for the digital workplace. In: Wolf F, editor. Social Intranet—Promoting Communication— Sharing Knowledge—Working Together Efficiently. Carl Hanser Verlag: München; 2011. pp. 14-40. ISBN 3-446-42791-0

[8] Available from: https://www2. deloitte.com/content/dam/Deloitte/ mx/Documents/human-capital/ The_digital_workplace.pdf [9] McConnell J. Trends für Intranet und digitalen Arbeitsplatz. In: Wolf F, editor. Social Intranet—Kommunikation fördern—Wissen teilen—Effizient zusammenarbeiten. Carl Hanser Verlag: München; 2011. ISBN 3-446-42791-0

[10] Available from: https:// ec.europa.eu/info/sites/info/files/ digitalworkplacestrategy2017.pdf

[11] Kampschroer K, HeerwagenJ, Powell K. Creating and testing workplace strategy. CaliforniaManagement Review. 2017;49(2):19-137

[12] Springer T. Fundamentals ofWorkplace Strategy. Illinois: Kimball;2011

[13] Savage AE. Workplace strategy: What it is and why you should care.Journal of Corporate Real Estate.2005;7(3)

[14] EU. Skills Challenges in Europe [Internet]. 2016. Available from: http:// skillspanorama.cedefop.europa.eu/sites/ default/files/2016_Skills_Challenges_ AH.pdf [Accessed: April 23, 2018]

[15] Behaviors That Spark Innovation and Drive Digital Transformation. Available from: https://playbook. amanet.org/training-articles-drivedigital-transformation/

[16] Available from: https://fowmedia. com/helping-your-employees-adapt-todigital-transformation/

[17] Available from: https://postshift. com/bridging-the-digital-skills-gap-inthe-digital-workplace/

[18] David A, Hamburg I. Entrepreneurship and Entrepreneurial Skills in Europe: Examples to Improve Potential Entrepreneurial Spirit. Barbara Budrich: Opladen; 2017. ISBN 978-3-8474-0568-9 [19] Hamburg I, Vladut G, O'Brien E. Fostering skills for digital social innovations in entrepreneurship education. In: 8th Balkan Region Conference on Engineering and Business Education and 10th International Conference on Engineering and Business Education. Sibiu, Romania, October, 2017: Conference proceedings. Warsaw: de Gruyter Open; 2018

[20] Bacigalupo M, Kampylis P, Punie Y, Van den Brande G. EntreComp: The Entrepreneurship Competence Framework. Luxembourg: Publication Office of the European Union; 2016

[21] Available from: http://publications. jrc.ec.europa.eu/repository/bitstream/ JRC101581/lfna27939enn.pdf

[22] Chinonye IM, Akinlabi M. Entrepreneurship curriculum and pedagogical challenges in captivating students' interest towards entrepreneurship education. Research Journal of Economics and Business Studies. 2014;4(1):1-11

[23] Hamburg I, Vladut G. Developing workplace research skills to bridge the innovation gap between university and industry. Advances in Social Sciences Research Journal. 2019;**6**(1):144-115