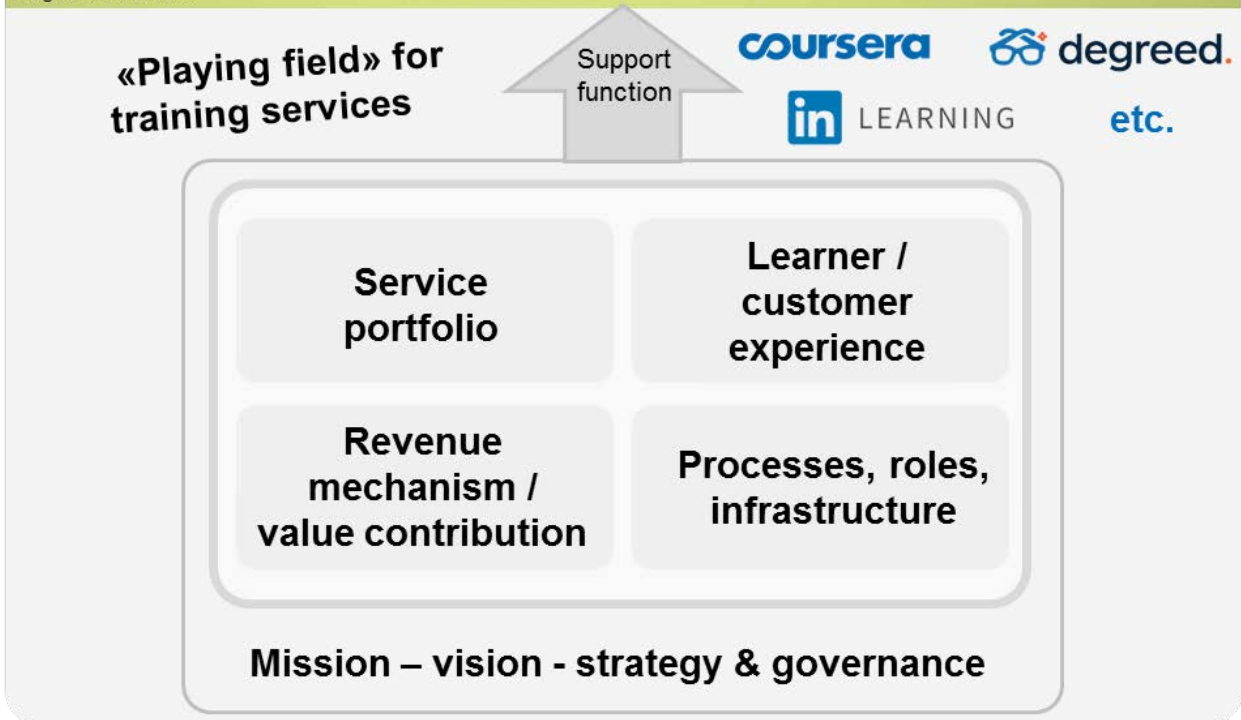




Image source: bitkom



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Digital transformation and L&D

Results of the determination of status quo and required actions

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2018, swiss competence centre for innovations in learning, St.Gallen
Translation by Allianz University



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Digitalization everywhere?! Learning 4.0@Allianz

Global connectivity, smart machines learning faster than any human being, artificial intelligence, virtual reality and new media are just some of the drivers reshaping how we think about work and how we learn and develop skills today and in the future.

In the near future, the average life-span of people will amount to 100 years - and the majority of our lives will be spent working and learning. That means that learning will take on a much larger, totally different significance. Very soon, most people will be able to boast at least six different professional careers, requiring essential further education and training - as well as re-training - whilst the relentless speed of innovation will constantly demand new skills and knowhow to keep pace.

This sounds like a real challenge for companies and, more importantly, for their training providers - and it is! After all: We can help to shape the digital transformation in our companies only if we assume the role of digital pioneers in the areas of learning and development. This is a demanding task. In order to succeed, we need answers to questions such as: Which competencies do personnel developers require today and tomorrow? How is our role and mission changing? What are the new business models in training and education? Any many, many more...

You can find the answers to these and many other questions in this benchmarking report which we, as Allianz, commissioned. We found the results so interesting that we would like to share them with you. We find ourselves together at the beginning of an exciting learning journey, which we, as training providers, should shape as actively as possible.

Dr. (RAEN) Diana Seibold
Allianz SE
Head of Allianz University for the Switzerland, Germany and CEE region

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1 Management summary

This report brings together the results of an empirical study on current issues and challenges of training management. This study was conducted in spring 2018 by 15 training professionals at different companies. The questions were derived from the scil framework model for the digital transformation of L&D. The following are the key results of the study:

- The **playing field** for corporate training providers is changing.

The majority of respondents to the survey say that cloud-based training services are giving rise to a change in the playing field. The assessments in this regard are varied and range from "gradual changes" to "fundamental changes". Training organizations need to monitor developments in cloud-based training services. They can complement their own service portfolio - especially in the area of interdisciplinary competencies. In the case of cooperation with external providers, the integration of offers on a central platform must be clarified and rules for the use of or sovereignty over process data must be agreed upon.

- **Role and mission** of the training organization are changing.

Currently, the role of "training services providers" dominates the L&D role portfolio, followed by the role of "Centre of Competence / Centre of Expertise".

In the future, a shift is expected from the role of "provider" to the roles of "broker for external offers" and "enabler of independent learning".

- The **management** of internal training organizations is (slowly) becoming more agile.

The internal training organizations are, for the most part, centrally organized and allocated to the area of human resources. Most training organizations currently have a more conventionally hierarchical structure. But, with almost two-thirds of the training organizations surveyed, a move towards agile forms of organization is either already underway or planned.

- "**Digital**" **competencies** constitute a central field of development and responsibility for L&D.

The most frequently mentioned areas of future-relevant fields of competence are:

- skills related to digitalization;
- skills that are important for tackling change and transformation;
- market orientation and entrepreneurial thinking / action.

The development or adaptation of framework models for the corporate competence and training management is an important task for L&D, and corporate management levels expect orientation and specialist expertise from L&D.

- Positive and negatively colored **experiences on the customer journey**.

Training organizations very often provide customers/participants with positive experiences at the heart of their performance process ("coach-led learning activities").

However, the experiences are less positive, especially in terms of finding suitable offers, preparatory phases (self-study) and supporting the transfer of newly developed knowledge / competencies to the field of work.

- Face-to-face training continues to dominate **competency development**, but learning close to one's workplace is gaining in significance.

Formally organized training (face-to-face training, blended learning and eLearning) will remain the most common form of competence development in the foreseeable future (timeline: 2-3 years). Various forms of learning (closer) to the workplace are, however, becoming increasingly important. However, some of these are not seen as the remit of personnel development / L&D, but are partly allocated to the area of organizational

development.

- **Media-based learning:** Other learning media complement the "traditional" WBT.

The currently most widely used form of eLearning (conventional, comprehensive WBT) will become less prevalent and gradually lose significance in the future. Other forms of media-based learning (eLearning nuggets, mobile learning with apps, video-based learning, training in virtual classrooms, etc.) will gain in prevalence and importance.

- High benefit potential via the digitalization of **L&D performance processes**.

Digitalization offers opportunities for the further development of internal L&D performance processes. Potential for automation / digitalization can be found throughout the entire process chain. The benefit potential of the examples discussed is generally considered high. With regard to the implementation, the majority of the companies/training organizations surveyed are in the planning or testing phase.

- There is a need for competency development and new profiles for **training professionals**.

In order to implement new formats of competence development as well as to exploit the potential of further digitalization of the internal L&D performance processes, suitably qualified training staff are required. In general, the representatives of the training organizations surveyed expect a broad set-up of competencies and availability across a range of different profiles.

- Shifts in **internal-clearing and revenue models** for training services.

The most important element by far in the funding mix of the training organizations surveyed is either project-related or globally available budgets.

Participation and usage fees are expected to become slightly less important, while subscription models and flatrates are expected to gain in significance.

- The development of **value orientation** in training work varies considerably.

In the assessment of the respondents, the particularly relevant process steps with regard to the value contribution of training work have been developed to varying degrees. The highest degree of implementation is seen in the involvement of key stakeholder groups in the phase of needs clarification and the development of the solution concept. The lowest degree of implementation in impact-oriented evaluation and success measurement.

- **Key management-relevant figures** for training work comprise an area of development.

The key figures for participation, reaction, success and benefits create a familiar picture: Key figures are rarely identified with regard to the "higher" evaluation levels (e.g. transfer success and business impact) which are particularly relevant training work in respect of management and resource allocation. This also applies to key figures in respect of the forms of competency development in the work process. This is expected to be expanded in the future. Costs and efficiency measurements are, however, more frequently recorded and evaluated.

2 About this study

This report brings together the results of a survey of representatives of 15 training organizations in companies on current issues and challenges in training management.

The subjects in this conjunction discussed were derived from a framework model for L&D digital transformation developed at scil.

For the majority of the subjects covered by this study, the evaluation of the results is carried out via the formation of averages and the observation of shifts between the current status and the level expected in two to three years. In this regard, it should be borne in mind that not only are there considerable differences between companies and their training organizations, but that significant differences can be found within the various training areas at large companies. Important information in this regard:

- The size of the training organizations involved in the survey (number of employees in the training organization) varies from 14 to about 1,000 employees.
- The roles with which the various inhouse training service providers operate differ. While certain training service providers see themselves primarily in the role of "provider", others consider themselves primarily in the role of "Center of Expertise / Center of Competence".
- While some areas / teams already rely heavily on different forms of technology-based learning in large training organizations, this can be quite different in other areas / teams.

This study was sponsored by Allianz Deutschland and the newly established Allianz University (AllianzU) there. The AllianzU brings together the interdisciplinary & manager qualification across the Group, and all activities related to the topic of "learning technology".

The implementation of the study at hand took place via the following steps:

- Development of a discussion guide on the basis of the scil framework model;
- Identification of relevant discussion partners and coordination with the client;
- Approaching the selected discussion partners and conducting expert discussions based on the guide (approx. 60 minutes each);
- Compilation of a results report which was then provided to all the training organizations involved in the study.

The following corporate training organizations or functions volunteered to take part in expert discussions, thus enabling this study:

- AXA Winterthur (Switzerland), Learning Culture & Innovation Lab
- Audi, vocational training / functional competency development
- BASF, ProTec Academy & General Training Offers
- Bayer, HR Innovation & Process Optimization
- Bosch, Robert Bosch Kolleg / Bosch Training Center
- Credit Suisse, Digital Learning
- Deutsche Bahn, New Learning Solutions DB Training
- Daimler, Daimler Corporate Academy
- Erste Bank Austria, Learning & Development
- Festo, HR Knowledge & Competence Management
- Post-CH, development
- SAP Germany, SAP Education MEE, Business Development
- SAP Germany, SAP Sales Learning
- Siemens, Siemens Global Learning Campus
- SwissLife, Learning & Development

3 Reference framework for expert discussions

Digital transformation refers to the profound changes that result from the intensive use of advanced digital technologies. These forms of technology currently include cloud services, apps, sensors, big-data technologies or artificial intelligence and machine learning. The associated changes concern not only the design of corporate performance processes (e.g. the creation of products and content). They also concern the design of interactions with customers and partners as well as the structuring of customer journeys and experience points (e.g. use of products and services via apps).

Finally, they also concern changes in the structure of business models (e.g. subscription models for content) (cf. also Seufert et al. 2017).



These changes have ramifications on the expectations which L&D faces as a support function within a company or organization. L&D is expected to work with greater agility and flexibility; to offer orientation when it comes to new competency requirements ("Which "digital" competencies do we really need?"); to offer new formats for the development of competencies - for example, modular, mobile and personalized; and to use new, high-performing in order to efficiently render and/or use training services (e.g. learning apps) (cf. Meier 2018).

Within the scope of the scil innovation group 2017 "Digital Transformation and L&D", a reference framework for these changes was drawn up (cf. image above and Meier 2018), which was then used as a starting point for the study at hand. The following themes were derived from this reference framework, which have been at the heart of the discussions with the training professionals at the companies listed above:

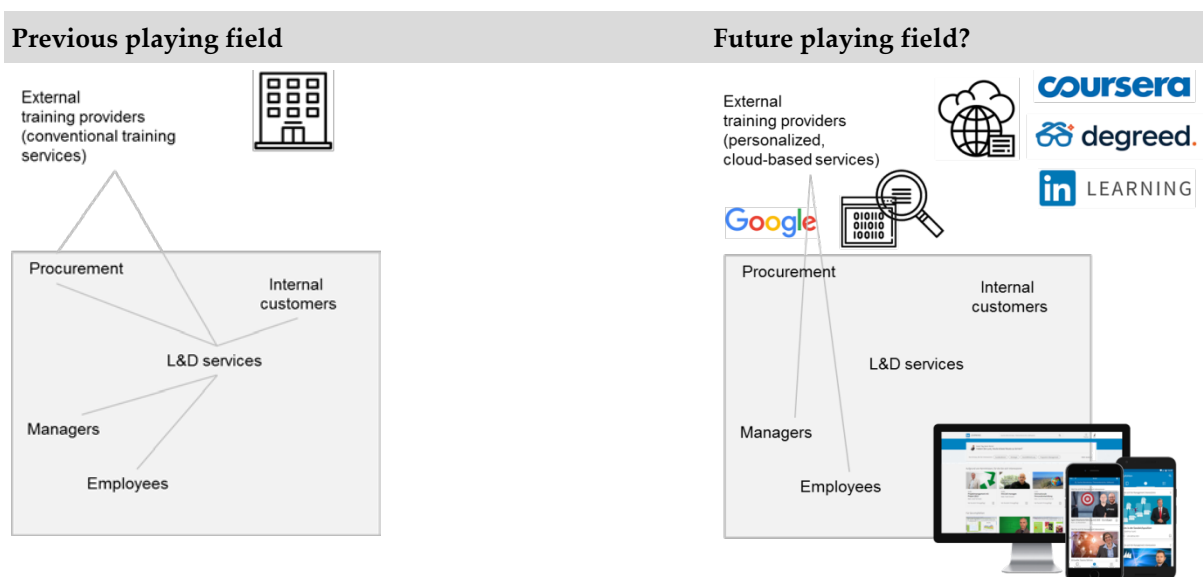
- Change of the playing field for corporate training providers
- Role and mission of the training organization
- Governance of the training organization
- Portfolio of the competencies to be developed
- Customer journey & customer experience: touchpoints & quality of experience
- Competency development: modalities / basic forms
- Media-based learning: types & significance
- Digitalization and L&D performance processes
- Digitalization and new profiles for training professionals
- Internal-clearing and revenue models for training services
- Value orientation of training work (value management)
- Key management-relevant figures on training work

4 Results

4.1 Changed playing field for corporate training providers

Background:

Digitalization offers opportunities for disruptive changes in the market for corporate training services as well. For example, external service providers can use digital services to bypass gatekeepers and reach employees directly at the workplace. Based on extensive user data and advanced analytics skills, these external service providers can (now or in the near future) offer highly personalized and individualized (and thus perceived as valuable) training services in a way that internal training providers (also due to a lack of comparative data) cannot.



Questions for the discussion partners:

- Is a fundamental change in the playing field in which you are moving visible to corporate training providers?
- What is the assessment of the associated changes, and what measures are being taken or prepared?

Results:

Is the sketched change visible?	
No	Yes
• •	• • • • • • • •
How are the effects to be assessed?	
Gradual	Fundamental
• • • •	• • • • • •

(Note: Each dot represents the location of one of the training organizations surveyed)

Measures on the part of the internal training providers	Number of times mentioned
None (yet).	● ●
Viewing of possible external partners for supplementary offers.	●
Formulating (technical) policies & recommendations for use for external cloud-based services.	●
Use of external opportunities in order to curate contents and offers.	●
Provision of integrating (learning experience) platforms to integrate external content... <ul style="list-style-type: none"> • without rules for the safeguarding of data sovereignty, • with rules for the safeguarding of data sovereignty. 	<ul style="list-style-type: none"> ● ● ● ● ● ●
The formulation of company-wide framework agreements with these external providers (e.g. procurement, notification obligations, use of process data).	● ● ●
Examining further steps regarding LinkedIn as a self-developing "shadow HR".	●

Central statements on this topic and [➤ comments by scil:](#)

- A majority of the experts surveyed see a change in the framework conditions for internal, corporate training providers.
 - The ramifications of these changes are currently estimated by a majority as gradual, less fundamental ("disruptive").
 - A differentiated picture emerges with regard to the measures taken by internal, corporate training providers in this situation:
 - A small proportion has not taken any measures yet.
 - For the most part, measures have already been taken.
 - The measures named differ in terms of orientation and reach.
 - The most frequently mentioned measures address
 - the formulation of framework agreements applicable company-wide with external providers (e.g. procurement, notification requirements, use of process data).
 - provision of integrating (learning experience) platforms to integrate external content - with / without regulations to safeguard data sovereignty.
- Training organizations must continue to monitor the developments outlined here.
- External training platforms offer the possibility of supplementing the inhouse service portfolios as training providers in a targeted manner - especially in the area of "interdisciplinary competencies" (e.g. methods and working techniques such as design thinking).
- It is important to define, at an early stage, framework conditions for the use and/or integration of external offers (e.g. whether they will be identified as external offers).
- In this regard, it is particularly important to have rules governing the use of process data / the safeguarding of data sovereignty. ("Data is the oil of the 21st century.")

4.2 Changed role and mission of the training organization

Background:

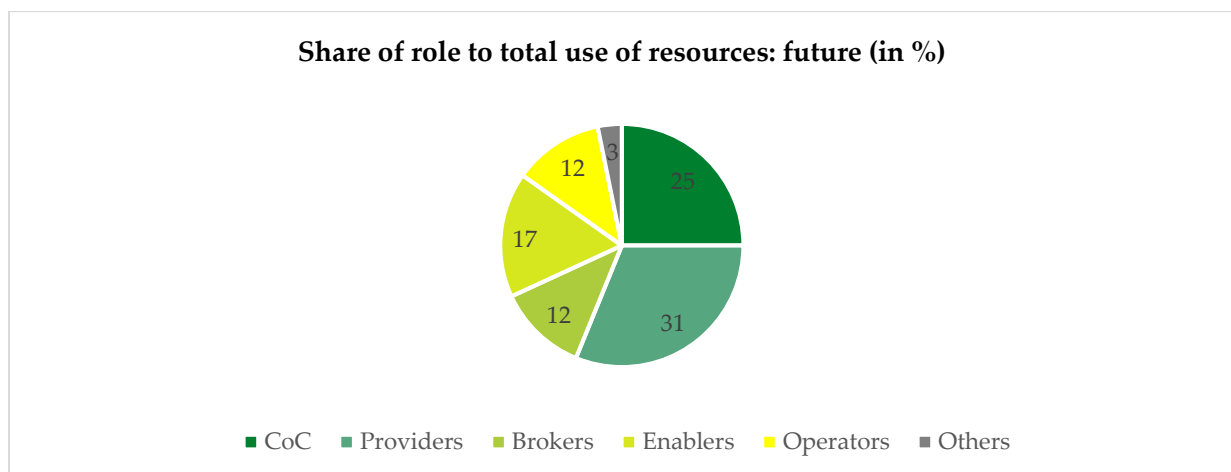
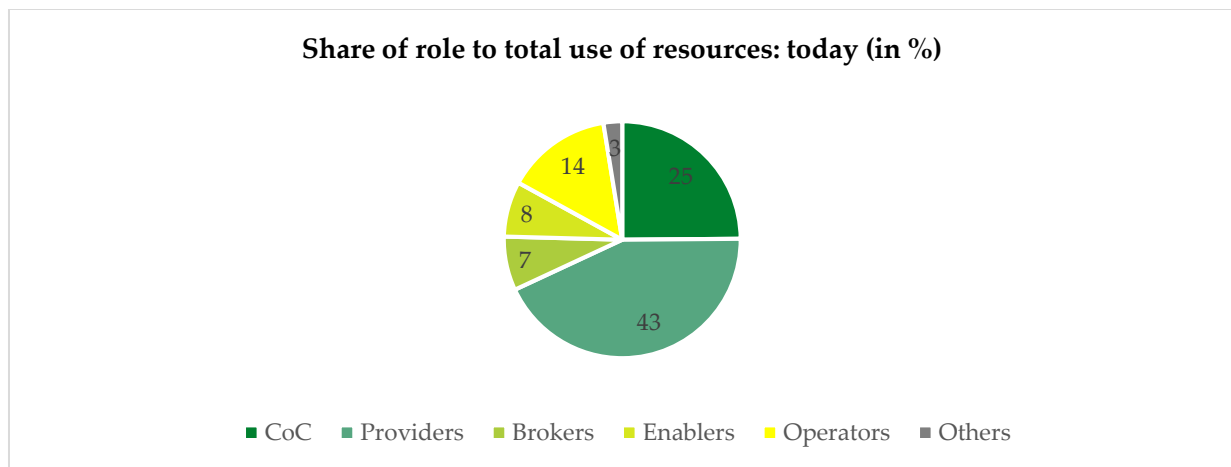
(Internal) training services providers can fulfill a series of various tasks and roles. These include, amongst others:

- supporters of strategy implementation & of the achievement of performance targets;
- designers of learning culture / enablers and promoters of a learning organization;
- center of competence / center of expertise (providing the mission statement, developing solutions, monitoring processes and standards etc.);
- providers of (self-) developed training services;
- brokers for training services of other external providers;
- enablers / supporters of independent (informal) learning and/or development activities;
- operators of learning infrastructure such as platforms for formal learning (LMS) or informal learning (online communities etc.).

Questions for the discussion partners:

- What is the current mission/role(s) of your training organization and what is the share of this/these role/s in the overall use of resources?
- Are significant shifts expected in this conjunction over the next 2-3 years?

Relevant roles for L&D:					
CoC / CoE: providing mission statement, developing concepts / solutions, monitoring processes and standards etc.	Provider of internally developed training services (possibly in cooperation with external partners)	Broker of training services of other external providers	Enabler of independent (informal) learning and/or development activities	Operator of learning infrastructure (platforms for formal and / or informal learning)	Other roles

Results:Central statements on this topic and [comments by scil:](#)

- Currently, the role of "provider of training services" dominates in the L&D role portfolio of the companies surveyed.
 - The role of "CoC / COE" also plays a significant role in the overall use of resources.
 - The role of "platform operator" currently comes third in terms of the share of total resource use.
 - The roles of "broker" & "enabler" currently account for a rather small share of the total use of resources.
 - Significant shifts are expected in the medium term (2-3 years).
 - The role of "provider" will use up a significantly smaller share in the overall use of resources.
 - The "broker" & "enabler" roles will account for a larger share of the total use of resources.
- The definition of the role/mission is a core element of the orientation of a training organization and has a significant impact on the structure of cooperation with other units. Here, a separate path, appropriate to the context, needs to be found, which includes a specific mix of roles and tasks.

4.3 The management of internal training organizations is (slowly) becoming more agile

Background:

Against the backdrop of demands for more agility, new organizational and management models are currently being discussed and tested - including for L&D. Examples of organizational and management models include:

- Hierarchy
- Holocracy (self-governing circles)
- Spotify engineering culture (tribes, squads, etc.)

An important aspect of the decision for such an organizational and governance model is the alignment to the framework conditions in which the organization operates:

- Requirements in terms of stability;
- Investments which pay off in the long term;
- Diversification of the target market and product portfolio;
- Management via developed strategies or guidelines in need of interpretation;
- etc.

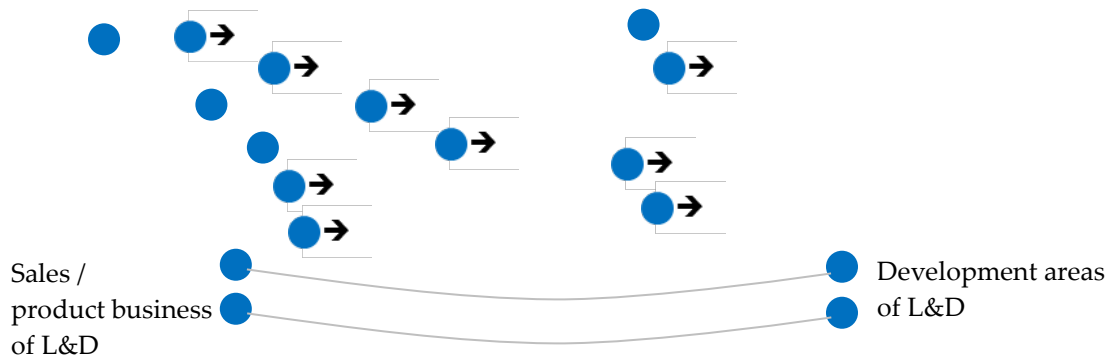
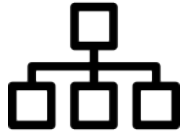
Questions for the discussion partners:

- How is your training organization embedded in terms of the company's organizational structure?
- Through which process or processes do you achieve and secure the orientation of the work rendered by your training organization to the requirements of the company as a whole or corporate / business area to which you are allocated?
- How is your training organization structured and managed internally? More conventionally in hierarchical terms, or in line with newer (agile) models such as holocracy or Spotify Engineering Culture?

Results:

- The internal training organizations are, for the most part, organized centrally.
- The internal training organizations are, for the most part, allocated to the Human Resources area.
- By far, the orientation of L&D work is implemented most frequently (almost 2/3 of the cases) to the requirements of the overall organization via a mixed model. In approx. 1/3 of the cases, a top-down model is implemented.
- The discussion partners do not expect significant changes to these aspects due to digitalization.

Orientation to basic principles for internal organization and management



(Note: Each dot represents the approximate location of one of the training organizations surveyed.

The arrows show the currently tracked directions of development.)

Central statements on this topic and [comments by scil](#):

- Most training organizations currently have a more conventionally hierarchical structure.
 - Agile forms of project work are also becoming increasingly important in training organizations.
 - With almost two-thirds of the training organizations surveyed, a move towards agile forms of organization is either already underway or planned.
 - In some training organizations, there is a clear differentiation between different sub-areas (e.g. sales vs. development).
- The potential benefits of agile forms of organization (e.g. holocratic forms of organization or Spotify Engineering Culture) for L&D are seen primarily in the following aspects:
 - Greater proximity to market / customer
 - More flexible reaction to customer enquiries;
 - (Greater) opportunities for employees to demonstrate their own potential;
 - Increased empowerment / experience of meaningful work / retention of employees.
 - The effort involved in the transition to agile forms of organization is not to be underestimated. In-depth structural and cultural changes may be required, which must be systematically enabled and supported.
 - One major challenge involves dealing with the areas of tension that arise when an agile sub-organization is connected to conventionally hierarchical sub-organizations via several interfaces.

4.4 "Digital" skills as central field of development

Background:

Against the background of the ongoing digital transformation, the question for L&D (once again) is what specialist and interdisciplinary skills will employees need in the future in order to successfully accomplish their tasks.

Questions for the discussion partners:

- Which (specialist) competencies / areas of competencies have to be developed more strongly in the future (also with a view to digital transformation)?

Central statements on this topic and ➤ [comments by scil:](#)

- The statements made by the discussion partners to this question reflect the broad and diverse concepts and models of competencies and/or competency management in companies.
- The most frequently mentioned areas of future-relevant areas of competency are:
 - Competencies in connection with digitalization;
 - Competencies which are important for the tackling of change and transformation;
 - Market orientation and entrepreneurial thinking / action.
- The individual points mentioned most frequently are:
 - Digital business (models) (5)
 - Digital workplace (incl. work tools) (4)
 - Technologies (4)
 - Agility and «fail fast» / «fail smart» (4)
 - General understanding of digital transformation (3)
 - Dealing with change / flexibility (3)
 - Methodological competencies (3)
 - Entrepreneurship / intrapreneurship (3)
 - Market orientation (3)
 - Understanding of digital markets (2)
 - Self-management & assumption of responsibility (2)
 - Ability to learn (2)
 - Analytical competencies (2)
- The development and adaptation of reference models which provide orientation for corporate competency and training management is an important task for internal training services providers. Corporate management levels, to a certain extent, also expect orientation and/or specialist expertise on the part of L&D with regard to the changing competency requirements.
- When discussing future competency requirements, the "augmentation" aspect (the effective interaction of humans and intelligent machines) must be borne in mind.

4.5 Positively and negatively colored experiences on the customer journey

Background:

The increasing digitalization of training services (e.g. use of learning platforms, use of digital media in teaching/learning processes, etc.) results in changes for the "customers" (here in focus: participants / recipients of services) both in respect of the entire experience journey (e.g. becoming customer / user, being customer / user), and with regard to individual touchpoints or experience points. Earlier, arriving in the seminar room and the first meeting with the trainer was a central "moment of truth" in the implementation of a training service; today, various digital experience points have been added today, such as

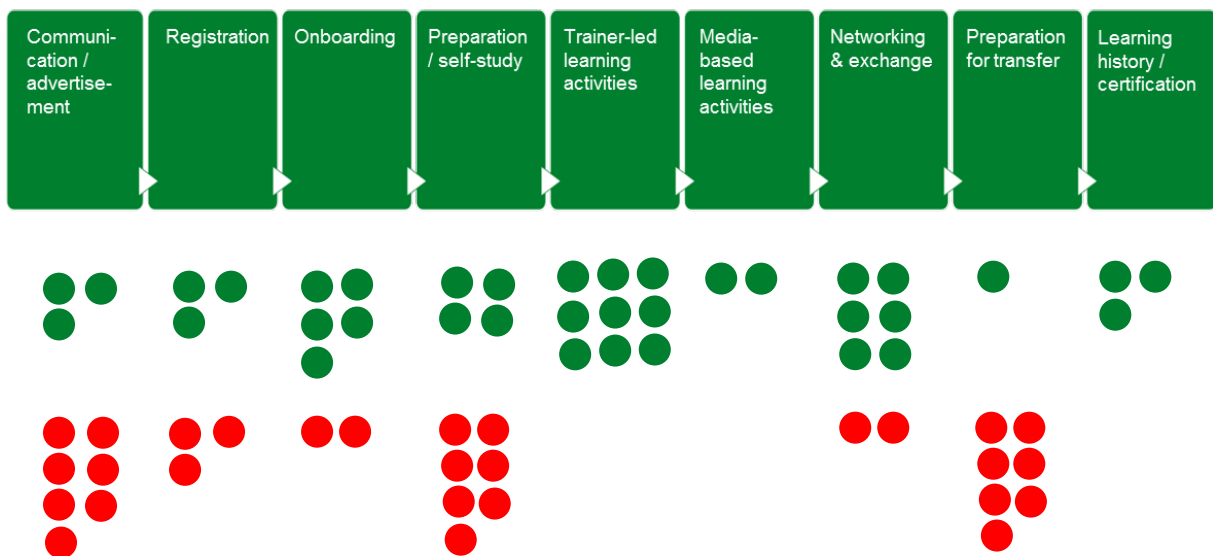
- looking for / finding (suitable) offers on digital portals,
- retrieving / processing digital learning resources,
- trainer-led meetings in virtual classrooms.

Questions for the discussion partners:

- At which points in the training process do participants in / users of training services have markedly positive experiences, or rather less positive experiences?

Results:

The customer journey - positive & negative experience points



(Note: Each dot represents an assessment by one of the training organizations surveyed
Green dots represent positive experiences on the part of participants, red dots for less positive experiences.)

Central statements on this topic and ➤ [comments by scil](#):

- The training organizations surveyed see strong positive experiences (green dots) of your customers (participants, users) primarily at these touchpoints:
 - onboarding (welcome address, orientation, introduction etc. for the participants);
 - trainer-led learning activities;
 - networking and exchange of thoughts and ideas amongst the learners / participants.
 - In their own assessment, the training organizations see rather less positive experiences of the participants / users (red dots) primarily at these touchpoints:
 - Communication & advertisement of the offers (What's there for me? Where can I find what?);
 - Preparation and/or self-study (e.g. building up basic knowledge by working through learning media on one's own time and at one's own pace);
 - Preparation for the transfer to daily working life (e.g. transfer support / transfer coaching, work aids, exchange of experiences).
- With a view to acceptance by "customers" or participants / service recipients, the structure of the customer journey and of the individual experience points is important - especially in view of changing expectations in the course of digitalization.
- In this conjunction, it is necessary to clarify to what extent the customer journeys and experience points which are the same or, in part, the same or different, are beneficial to the various target groups (e.g. older vs. younger employees).

4.6 Face-to-face training continues to dominate, learning close to the workplace gains in importance

Background:

In the past, the identification of requirements for the development of knowledge/competencies almost automatically led to the development of a tailored course offer. The discussion over the last 10 years (including on "informal learning") has made it clear that the development of knowledge and competencies also, if not even primarily, takes place outside of classrooms.

The multi-faceted possibilities of knowledge and competency development may be structured as follows:

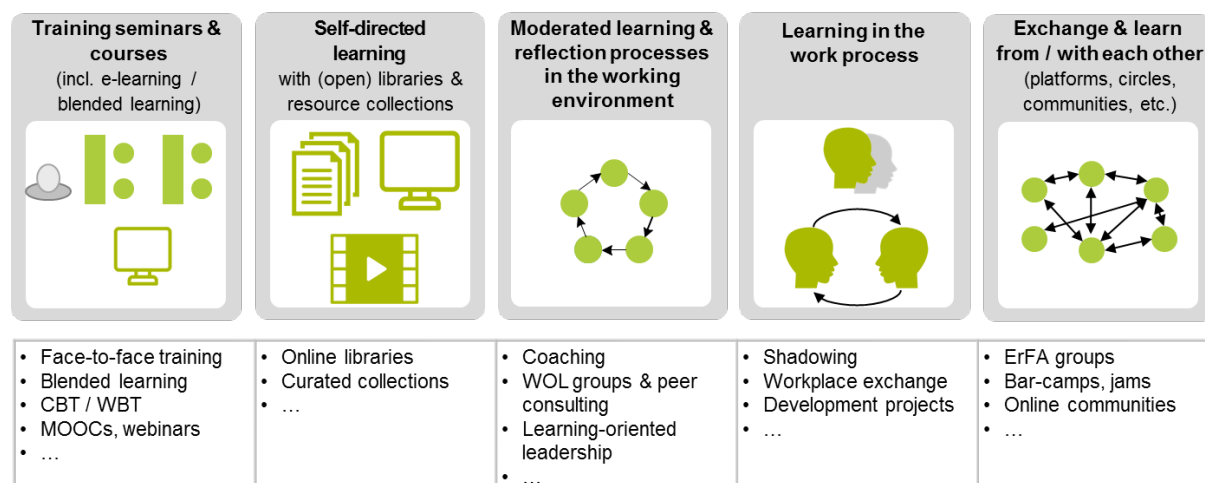
- formally organized training seminars and courses,
- self-directed learning with (digital) libraries and resource collections,
- moderated learning and reflection processes in the working environment,
- learning in the process of work,
- exchanging and learning (self-directed) in groups, networks and communities.

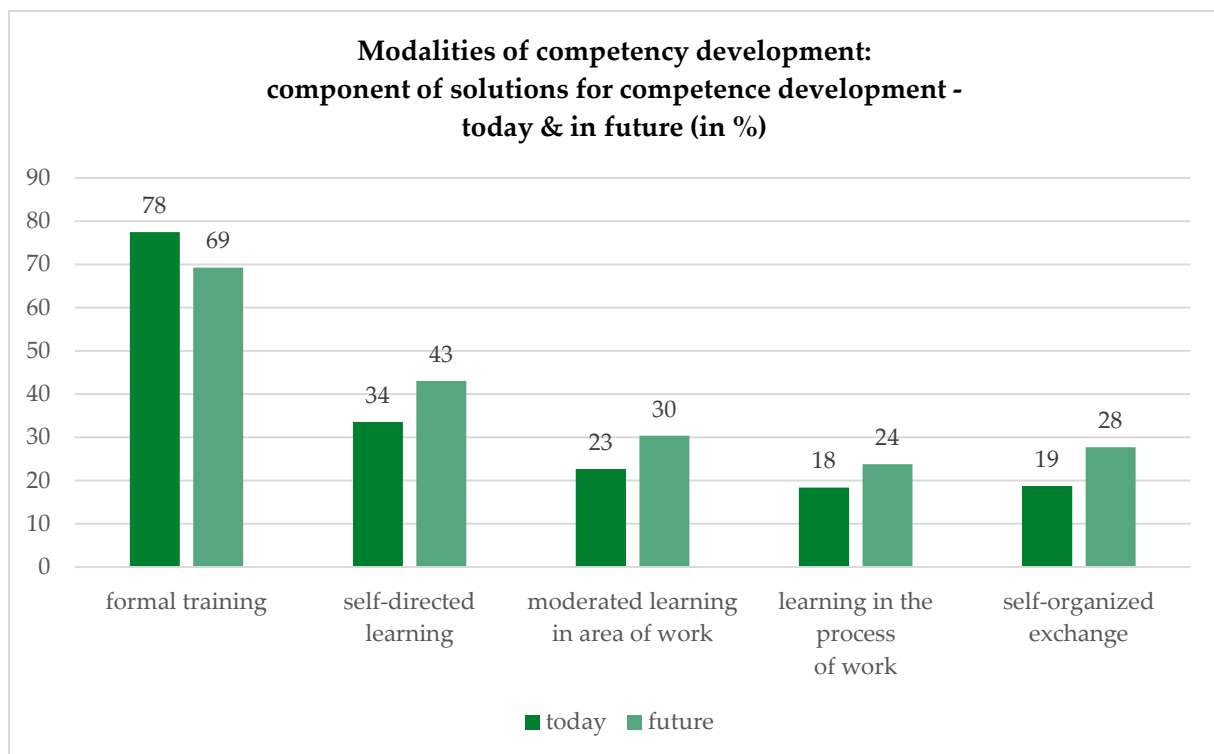
As such, (internal) training providers have to know

- the modalities / formats with which their target groups are familiar;
- the modalities / formats which their target groups prefer;
- which options for implementation and structuring are provided within the individual modalities / formats.

Questions for the discussion partners:

- Which modalities / formats of corporate further training currently constitute a component of a development initiative / of a solution for competency development for a defined target group, and how often?
- Which modalities / formats of corporate further training will, in the future (i.e. in 2-3 years), constitute such a component more frequently / less frequently?



Results:Central statements on this topic and [comments by scil:](#)

- Formally organized training in the form of face-to-face training, blended learning and eLearning is the most wide-spread form of competency development today and this will continue to be the case in the foreseeable future (2-3 years).
 - Shifts are emerging in terms of weighting and/or frequency with which the various modalities form a component of overall solutions:
 - With the exception of formally organized training, all other modalities of competency development will gain in weighting / prevalence in the future:
 - Self-directed learning with libraries and resource collections;
 - Moderated learning and reflection processes in the area of work;
 - Learning in the process of work;
 - Exchanging and learning from and with each other.
 - At almost 50%, self-directed learning with libraries and resource collections will, in the foreseeable future (2-3 years), become the second-most important modality for the development of knowledge and competences.
- The modalities of competency development which are gaining in weighting / prevalence
- do not, as a general rule, represent the core competencies of training professionals thus far, and/or
 - are, in part, not allocated to the area of responsibility held by PD / L&D, but, for example, the area of responsibility overseen by organization development.
- This results in an important interface theme for PD / L&D: cooperation with areas such as corporate knowledge management or organizational development.

4.7 Media-based learning: Other learning media complement traditional WBT

Background:

The possibilities of media-based learning are diverse. With every technology boost, further possibilities are added (e.g. augmented reality or virtual reality).

(Internal) training providers have to orientate themselves to

- the forms of media-based teaching / learning with which their target groups are familiar (i.e. also the media with which they deal or are able to learn well);
- the forms of media-based teaching / learning their target groups prefer;
- and the forms of media-based teaching / learning which are suited to the achievement of the development goals (both didactically as well as in terms of the associated requirements in respect of technical and financial resources).

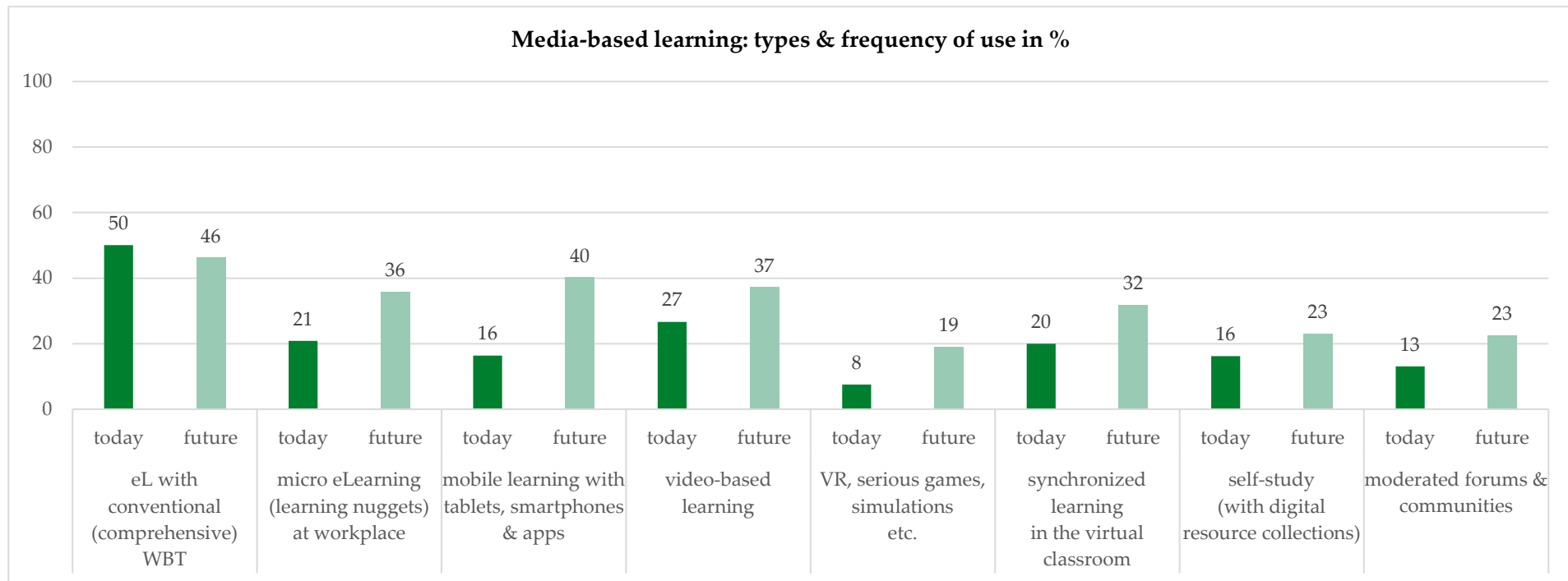
Central statements on this topic and [comments by scil](#):

- The currently most widely used form of eLearning (conventional, comprehensive WBT) will become less prevalent and gradually lose significance in the future.
 - In the opinion of the experts polled, all the other forms of media-based learning addressed within the scope of the study will see a gain in prevalence and significance.
 - The expected increase in the prevalence and importance of mobile learning with tablets, smartphones & apps is particularly marked.
 - A very significant increase is also expected for forms of micro-learning at the workplace.
 - The lowest prevalence / significance of media-supported learning is seen today and in 2-3 years in respect of serious games, simulations and VR applications.
 - Unlike today, where one media-based form (conventional WBTs) dominates, a broad palette of almost equally prevalent and significant media-based forms of learning or rather competency development is expected for the foreseeable future (2-3 years).
- The expansion of the range of media-based learning opportunities as expected by the experts polled requires an expansion of the competencies and capacities in respect of the following aspects:
- Expansion of competencies in respect of the concept / implementation of media-based learning activities;
 - Expansion of competencies in respect of the execution, support and monitoring of media-based learning activities;
 - Expansion of personnel capacities for the creation / provision / execution / support and monitoring of media-based learning activities; alternatively, cooperation with external partners has to be stepped up.

Questions for the discussion partners:

- Which technology-based forms of learning form a part of an initiative / offer for competency development, and how often? Today? In 2-3 years?

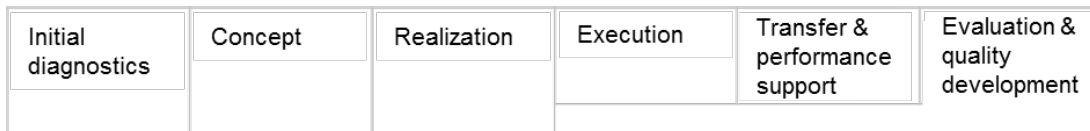
Results:



4.8 High benefit potential via digitalization of L&D performance processes

Background:

The typical internal performance process of a training service provider can be presented in a simplified manner as follows:



With progressing technical development, new possibilities for digitalization and automation will become available for each of these process steps. Examples include

- online diagnosis / eAssessment in respect of knowledge, skills, preferences;
- supplementary to the option "make" and "buy", also "curating" digital resources and/or learning material;
- the use of AI-based tools, for example, for the (partially) automated creation of (simple) learning content (solutions such as deepl.com for the machine translation of learning material as well are becoming increasingly more effective; solutions such as Volley.com or WildFireLearning.co.uk for the machine-based generation of quiz questions pertaining to texts previously read or videos are currently in development or already commercially available);
- the systematic structuring of transfer phases based on digital transfer-management systems.

Questions for the discussion partners:

- Where do you see the greatest benefit potential for the further digital development of L&D performance processes?
- How do you assess the readiness of your own training organization to implement the examples of digitalized performance processes listed here?

Results:

Phase	Initial diagnostics	Concept	Realization	Execution		Transfer & performance support		Evaluation & quality development
Example	Online diagnostics prior to the start of the learning process	Curating of digital learning resources	AI-based, (partially) automated content creation	Adaptive learning systems	Bot-based support systems	Online communities	Transfer-management systems	Use of analytics
Potential								
high								
average								
low								
Level of readiness								
Routine								
Testing								
Planning								
Not planned								
Unknown								

(Note: Each dot represents a response from one of the training organizations surveyed.)

Central statements on this topic and ➤ [comments by scil](#):

- The examples of automation and digitalization in the L&D performance process are at different stages of development. Online learning communities already form part of the practice in many places, while AI-based solutions for the (partially) automated creation of learning content are still in the process of being developed.
 - **Most** examples of automation / digitalization in L&D's performance process are, for the most part, attributed a **high degree of benefit potential**.
 - Exceptions are AI-based (partially) automated content creation and transfer management systems (e.g. learning transfer systems; Fort Hill); here, some of the respondents complained of a lack of knowledge of technologies and solutions to be able to assess the potential;
 - The topic of "curating digital learning resources" shows the greatest dispersion of assessments with regard to the benefit potential.
 - The **degree of readiness for implementation** reflects a rather differentiated picture.
 - The highest degree of readiness for implementation is seen in the topic of "online (learning) communities". In many training organizations, this already forms part of the routine.
 - The topics seen by many as being "tested" are
 - online diagnostics prior to / at the beginning of the learning process;
 - adaptive learning systems;
 - use of analytics.
 - The use of learning analytics for purposes of quality development was mentioned most frequently as being "in planning".
 - The lowest level of readiness was seen in respect of the following topics:
 - AI-based, (partially) automated content creation;
 - use of transfer-management systems.
- Observing the technical developments and a (critical) assessment of the potential benefits resulting from further automation/digitalization in terms of the structuring of internal performance processes is an important task for training organizations and training professionals.
- For training organizations, it should be considered whether they want to promote a more intensive approach taken by training professionals vis-à-vis new technologies and their potential (and limitations) in the broad spectrum, or, alternatively, whether the establishment up of a CoC/CoE in respect of "digital learning and process design" is more effective.

4.9 Competency development and new profiles for training professionals

Background:

In order to implement new formats of competence development as well as to exploit the potential of further automation and digitalization of the internal L&D performance processes, suitably qualified training staff are required. This is where new profiling for training professionals or "learning professionals" begins to emerge.

Relevant new roles and competency profiles for L&D professionals include:

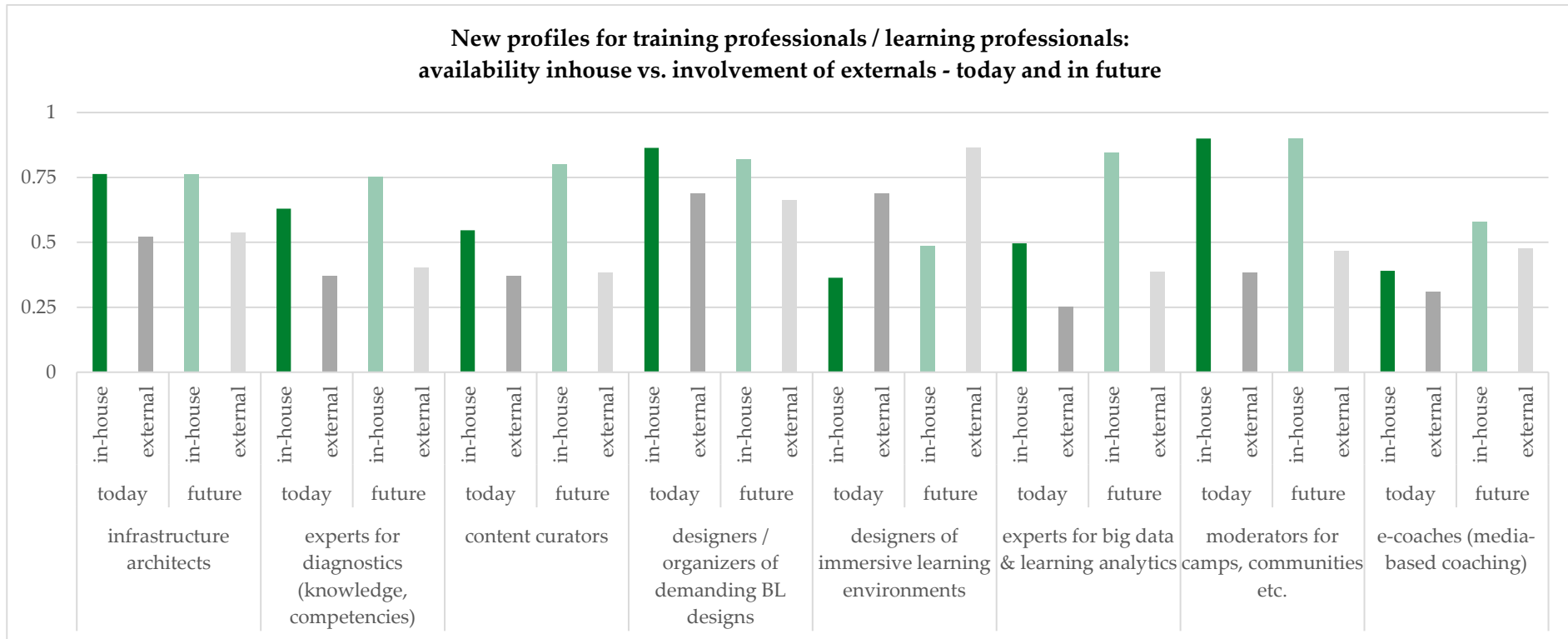
- learning infrastructure architects;
- experts for knowledge and competency diagnostics;
- curators of (open) digital learning resources / learning material;
- designers of immersive learning environments (AR, VR, Sims, etc.);
- experts for big learning data & learning analytics.

Central statements on this topic and [comments by scil](#):

- The "new" competency profiles for learning professionals listed as examples are now almost universally available in-house rather than hired externally. It is expected that this will continue to be the case in the foreseeable future (2-3 years).
 - Exception: designers of immersive learning environments. To a large extent, these are hired externally today and this will continue to be the case in the foreseeable future.
 - The following profiles are currently hardly or only partially available internally:
 - designers of immersive learning environments;
 - eCoaches;
 - experts for big learning data and learning analytics;
 - curators of learning content.
 - An entire series of the profiles listed are to be internally reinforced / expanded upon during the coming years. When ordered in accordance with the extent of expansion, these are:
 - experts for learning analytics; (whereby it is still, in part, still unclear as to whether this profile is to be established in L&D itself or in superordinate HR departments);
 - curators of learning content;
 - eCoaches;
 - designers of immersive learning environments;
 - experts in knowledge / competency diagnostics.
 - Overall, the representatives of the training organizations surveyed expect a wide-ranging development of "new" competency profiles, and, at the same time, the increased the use of external support with some of these competency profiles, namely in respect of
 - designers of immersive learning environments;
 - experts for big learning data and learning analytics;
 - moderators for camps and communities;
 - eCoaches.
- The expected (or desired) broad development of "new" competency profiles as well as the expected (or desired) increased use of external support at the same time will probably lead to increased financing needs - or require increased cost reductions through process improvements and automation (cf. above).

Questions for the discussion partners:

- Which new role profiles are being developed/ are available at your company or are to be developed in the next 2-3 years?
- Which role profiles are covered by external support today or in the future as well?



Legend:

- 1 = Profile is extensively available or externally hired to a large degree;
- 0.5 = Profile is partially available or partly externally hired;
- 0 = Profile is not available or not hired externally;

4.10 Shifts in internal-clearing and revenue models for training services

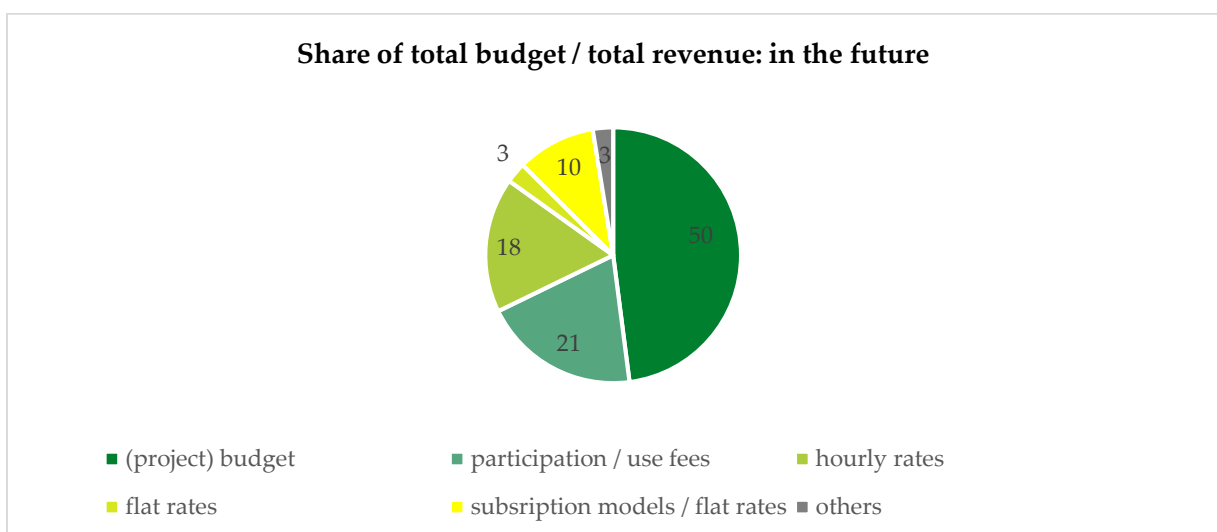
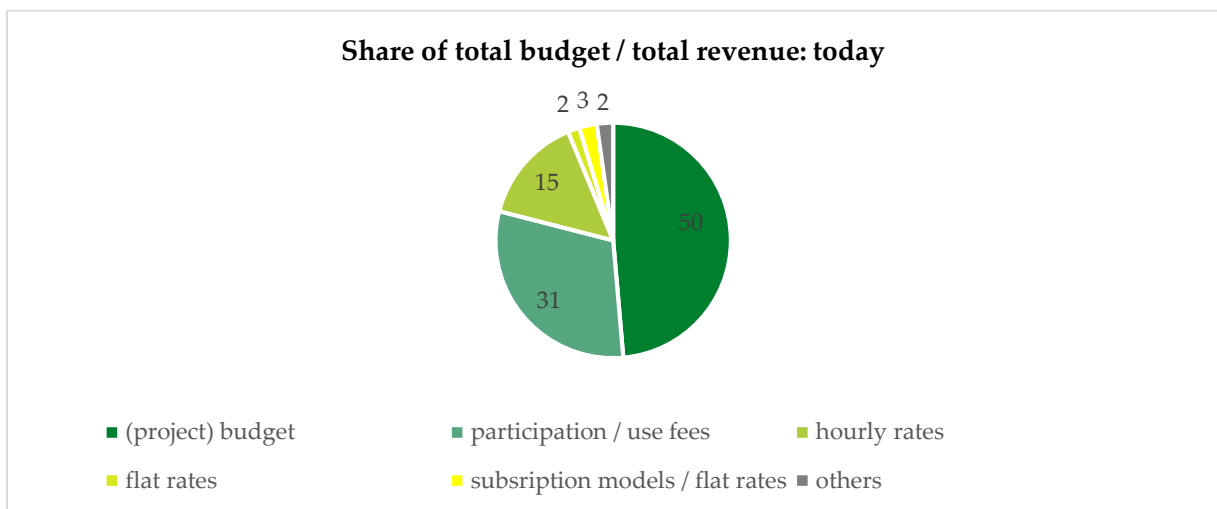
Background:

In view of the expectations regarding expanded service offers (portfolio of teaching/learning formats, including those which are technically based) and the need to build up competencies on the part of training staff (or support from external specialists/service providers), the question arises regarding viable internal-clearing and revenue models for training services.

Questions for the discussion partners:

- What is the share of the following internal-clearing or revenue models in the overall budget of your training organization?
- Which shifts / changes do you expect in this regard in the next 2-3 years?

Results:



Central statements on this topic and ➤ [comments by scil](#):

- The most important element by far in the funding mix of the training organizations surveyed is either project-based or globally available budgets.
 - In second place are participation and usage fees for the products and services provided by L&D.
 - Hourly rates for consultation / support / coaching / etc. come in at third place.
 - Currently, other internal-clearing or revenue models play a subordinate role.
 - Shifts in terms of internal-clearing or revenue models are expected for the next 2-3 years:
 - Participation and usage fees lose a certain amount of significance;
 - Hourly rates for consultation / support / coaching / etc. gain somewhat in significance;
 - Subscription models and flatrates for training services and training resources (e.g. access to online libraries) gain in importance, but, on average, make a rather small contribution towards the overall financing mix.
- The expected changes in the area of corporate training work require adaptation of competencies and capacities as well as alignment of the financing models - and, as the case may be, also of the financing requirements. This will fuel the debate about the added value of corporate training work.

4.11 The development of value orientation in training work varies considerably

Background:

Training services can only develop a perceived value if they (and the entire performance process from which they originate) are geared to the concerns of the stakeholders concerned.

"Since value is defined by the receiver (...) any value proposition begins with focusing on receivers (...). For HR professionals, the value premise means that rather than imposing their beliefs, goals, and actions on others, they first need to be open to what others want." (Ulrich & Brockbank, 2005, pg. 4).

For training professionals, this also means the following:

- They have to orientate their actions to the respectively central stakeholder groups;
- They have to gear the entire performance process (clarifying requirements, concept / design, execution, transfer support, evaluation) so that the concerns of these stakeholder groups linked to intrinsic value are satisfied (cf. Meier 2012).

The aspects taken into account in this survey represent central aspects of value-oriented training management.

Questions for the discussion partners:

- How do you currently assess the degree of implementation in respect of the following aspects of value-oriented training management?
- In your opinion, what are the most important approaches for further development in the next 2 years?

Results for 10 training areas polled in this conjunction*:

No	Orientation of the offer portfolio to strategic fields of action & regular review / adjustment		Involvement of central stakeholder groups in clarification of requirements, solution concept etc.		Assessment & use of potential to reduce expenditure in development / implementation		Impact-oriented structuring and/or implementation of offers / measures		Impact-oriented evaluation / performance management	
1	M		H		M		M/H	Competency development (specialists)	M	Project impact measurement
2	H		H		H		M		L	Implementing evaluation / feedback more directly (e.g. apps)
3	H		M/H	Considering/planning business impact with the stakeholder groups from the very beginning	M	Further digitalization	H		H	
4	M		H		M		H		M	
5	M		H		M		M	Introduction of new role of "performance analyst"	L	Introduction of new role of "performance analyst"
6	M	Head of HR-Dev. involved for the first time in developing a corp. strategy	H		M	New tools for training administrators	M		H	
7	H		H		M	Check "make" vs. "buy"	H		M	Feedback with stars (higher level of acceptance)
8	H		H		M	Reviewing / streamlining portfolio (in part. with regard to regulatory framework)	M		M	Further development of evaluation instruments
9	M		H		L		M		M	New reporting with qualitative key figures
10	H		M	Enhanced use of agile development methods	M	Modularization of content	H	Professionalization of digital forms of teaching / learning	M	

Legend:

«H» degree of implementation = high «M» degree of implementation = medium «L» degree of implementation = low

*Note: This aspect could not be fully addressed in all interviews. As such, only ten results are shown here. Each line shows the manifestations at one of the training organizations surveyed.

Central statements on this topic and ➤ [comments by scil](#):

- The process steps especially relevant to the value contribution by L&D vary.
 - The greatest amount of diversity is shown in the aspect of evaluation or performance measurement.
- If the focused process steps were to be ordered according to the average value for the degree of implementation, the resulting order (high to low) is as follows:
 - Involvement of central stakeholder groups in clarification of requirements, solution concept etc.
 - Orientation of the offer portfolio to strategic fields of action;
 - Impact-oriented structuring and/or implementation of offers / measures;
 - Assessment & use of potential for reductions in expenditure;
 - Impact-oriented evaluation / performance measurement;
- The process steps in respect of which concrete development plans were named most frequently are
 - development / implementation and the potential for reductions in expenditure;
 - impact-oriented evaluation / performance measurement.

- The development plans named are listed in the following table:

Process step	Measures mentioned in respect of further development
Orientation of the offer portfolio to strategic fields of action	<ul style="list-style-type: none"> • Orientation to "innovation adoption" (additional statement from interviews) • Involving head of HR Dev. in the development of the company strategy
Involving central stakeholder groups in the clarification of requirements, solution concept etc.	<ul style="list-style-type: none"> • Considering / planning the business impact with stakeholder groups from the beginning • Enhanced use of agile development methods
Assessment & use of potential for reductions in expenditure in development / implementation	<ul style="list-style-type: none"> • Expanding digitalization • New tools for training administrators • Checking "make" vs. "buy" • Reviewing / streamlining portfolio (in particular, with respect to the regulatory framework) • Modularization of content
Impact-oriented structuring and implementation of measures	<ul style="list-style-type: none"> • Development of competencies (L&D specialists) • Introduction of new role of "performance analyst" • Professionalization of digital forms of teaching / learning
Impact-oriented evaluation / performance measurement	<ul style="list-style-type: none"> • Project on impact measurement • Evaluation / feedback more directly (e.g. via apps) • Introduction of new role of "performance analyst" • Feedback with stars (higher degree of acceptance) • Further development of evaluation instruments • New reporting with qualitative key figures

- In view of the foreseeable need for resources for the (further) development of the offer portfolio (e.g. digital forms of learning) and for the provision of new specialist profiles for training professionals (e.g. experts for learning analytics), it is expected that training organizations will be required to highlight the value contribution of their work to a greater degree. In this conjunction, the use of potential for reductions in expenditure (e.g. via the curating of content, via automation etc.) and the emphasis on effects via impact-oriented evaluations are particularly important.

4.12 Key management-relevant figures comprise an area of development

Background:

Appropriate key figures are needed for the target-oriented management of corporate training work. These may refer to various aspects: input (e.g. use of financial, personnel and physical / digital resources); process (e.g. development formats; time to delivery); output (e.g. participation / penetration rates, learning and transfer success).

Questions for the discussion partners:

- Which key figures in respect of training work are currently being recorded / monitored?
- Which key figures will be recorded / monitored in the future?

These questions could not be addressed in all the expert discussions to the same extent. For this reason, only rather vague statements follow in this regard.

Central statements on this topic and ➤ [comments by scil:](#)

- 1) Key figures in respect of participation, reaction, success, benefits.**
 - Based on the assumption of a medium level (learning success) or low level (transfer success and business impact) currently, the experts surveyed expect a significant expansion in the determination of these success indicators over the next 2-3 years.
 - A determination of the ROI for competency development measures is hardly performed today and will only be made in a few cases in the future.
 - 2) Key indicators in respect of aspects related to costs and efficiency**
 - In terms of the costs and efficiency measurements (e.g. ratio of L&D expenditure to total personnel costs), the following values are currently very often reported: Overall costs of personnel development per person employed per year; number of formal learning hours per person employed / year and number of employees per person working at PD / L&D.
 - The most significant growth in the near future (2-3 years) is expected in:
 - Number of employees per person working at PD/L&D;
 - Share of external expenses for L&D (external commissioning).
 - 3) Key figures in respect of the forms of competency development in the work process.**
 - Key figures in respect of the forms of competency development in the work process (from the exchange of knowledge to coaching to development projects) are - in stark contrast to the key figures monitored prior thereto - currently hardly or very infrequently determined and/or evaluated.
 - For the next 2-3 years, the respondents expect a strong expansion in the efforts to ensure transparency and reporting on these forms of development.
- To demonstrate the value of corporate training work in a convincing manner, it is important to highlight effects at the levels of "transfer success" and "business impact" as well as to emphasize the use of resources. In this conjunction, many training organizations still have potential for development.

- In the context of the increasing importance of informal learning activities (e.g. Cross 2007 or Jennings 2013) as well as learning close to the workplace (e.g. ATD 2017), it makes sense to define and monitor management-relevant key figures in this area as well.

5 Required actions for L&D

The changes summarized under the buzzword "digital transformation" which follow from the use of advanced digital technologies are also relevant to corporate personnel development and corporate training management. These changes have ramifications on the expectations which L&D faces as a support function within a company or organization. Current buzzwords in this conjunction include "agility", "digital competencies" and "digital learning".

Given the 15 expert discussions conducted in total, the meaningfulness of this study is limited. Nonetheless, required actions can be derived from the results. The following compilation includes a number of central points in this connection. Whether and to what extent these are relevant in individual cases must be examined against the backdrop of the status quo of the respective inhouse training organization.

- **Monitor changes in the playing field for corporate training providers via external, cloud-based providers.**

Training organizations should monitor closely the currently developments in respect of external, cloud-based offers and services. And they should orientate themselves to how other companies / organizations tackle the associated challenges. This includes, among other things, the integration of various internal and external offers on a central, easily accessible and searchable (learning) platform, the structuring of cooperation agreements and regulations for the use of process data.

- **Check adaptations in respect of the role and mission of the training organization towards CoE / broker / enabler.**

The decision in favor of a role profile constitutes a fundamental aspect in the orientation of a corporate training provider. In view of the emerging changes in the playing field, it is necessary to examine to what extent the often dominant role as "training providers" is future-oriented and to what extent other roles (e.g. "Center of Competence", "broker for external offers" or "enabler of independent learning") should be reinforced.

- **Increase agility in the management of the training organization.**

Where does one's own training organization stand in the tension between conventionally hierarchical organizational principles on the one hand and agile forms of organization on the other? How do others navigate their way in these are of tension? What do they experience in this conjunction and what can one's own training organization learn from these experiences? These are questions which training organizations should pursue.

- **Use and spell out and orientation framework for "digital competencies".**

The development and/or adaptation of company-specific competency models as a basis for goal-oriented competency development form an important task for internal training providers. In this conjunction, corporate management levels expect orientation and specialist expertise from L&D. Training professionals should gear themselves to the orientation frameworks for "digital competencies" used by other companies and organizations, and to the manner in which they use them as the basis for systematic competency development.

- **Consciously design the customer journey and customer experience with a view to the digital touchpoints.**

Customer journeys and customer experiences are changing in this increasingly digitalized world. Some of the established touchpoints are becoming less important, and new touchpoints

are added. Training organizations have to be familiar not only with their target groups and their needs. They also have to know what these customer groups experience at the various touchpoints. This then forms the basis for the effective structuring and development of the customer experience.

- **Expand the service portfolio for competency development, and consciously integrate formats such as self-directed learning or learning in the process of work.**

In the context of a changing playing field (see above), training organizations should look into what extent they can offer or support a wider portfolio of development formats beyond formally organized learning activities (courses, training, eLearning) (self-directed learning, moderated learning and reflection processes in the field of work, learning in the process of work, etc.). Some of these formats are seen as lying outside the L&D area of work. It is important here to actively cultivate your own mandate and, where appropriate, to maintain cooperation with other functional areas (e.g. organizational development).

- **Media-based learning - use the entire breadth of the potential offered by media-based forms**

Various forms of media-based learning are not only "trendy" (e.g. video or virtual reality); they are also actively sought by target groups (e.g. materials tailored to mobile end devices for sales staff). Training organizations should examine whether they have been able to provide their target groups with user-friendly, user-oriented and qualitatively appropriate learning media in the required breadth so far, and orientate themselves to best-practice examples to this end.

- **Check digitalization and automation potential for the performance processes of L&D.**

With the progressing technological development, new possibilities of digitalization and automation (e.g. use of adaptive, AI-based learning systems) are available for the various process steps along the L&D value chain (diagnostics, realization, implementation, etc.). Training organizations should monitor these developments (including how others deal with them and what experiences they have), assess potential benefits, and, where appropriate, test new ones themselves.

- **Develop new competency profiles for training professionals in a targeted manner.**

In order to implement new formats of competence development as well as to exploit the potential of further automation and digitalization of the internal L&D performance processes, suitably qualified training staff are required. This is where new profiling for training professionals or "learning professionals" begins to emerge (e.g. experts for knowledge/competency diagnostics, content curators or experts for learning analytics). Training organizations should develop a plan as to where they can and want to build up new competency profiles, and where they want to draw on external support.

- **Check and adjust internal-clearing and revenue models for training services.**

In view of the expectations of an expanded portfolio of teaching/learning formats, including technically supported ones, and the need to build up competencies required by digitalization on the part of training staff (or external specialist support), the question arises of a sustainable financing, internal-clearing and revenue model for training services rendered internally. Training organizations should examine the extent to which established revenue flows, such as participant / usage fees, have to be supplemented with, for example, subscription models and flatrates.

- **Reinforce the value orientation of corporate training work through prevention of expenditure (automation) as well as via impact-oriented evaluations.**

The expected changes in the area of corporate training work require adaptation of competencies and capacities as well as alignment of the financing models - and, as the case may be, also of the financing requirements. This will fuel the debate about the added value of corporate training work. The particularly relevant phases in terms of a perceptible value contribution of training work are, as the results of the study show, of varying degrees. The need for action is particularly apparent in two phases: When testing and using potential for reductions in expenditure, and when performing impact and benefit-oriented evaluations.

- **Use key figures on training work more systematically in order to demonstrate the benefits of L&D.**

To demonstrate the value of corporate training work in a convincing manner, it is important to highlight effects at the levels of "transfer success" and "business impact". In this conjunction, many training organizations still have potential for development. The same applies to informal learning activities and forms of competency orientation in the work process. Against the background of the discussion on the importance of informal and workplace-oriented learning, training organizations should also define and monitor management-relevant key figures in this conjunction and, as the case may be, derive measures.

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About scil

scil works in the area of intersection between training, innovation and management. The aim of scil is to promote education and training in a sustainable manner through the practical application of the latest research results, methods and technologies. The current focus in this regard is the digital transformation of further training and personnel development.

Further training - consultancy - research

We attach great importance to the fact that our three areas of work - further training, consultancy, research - are interdependent and mutually beneficial.

Renewal and optimization

(Corporate) training work is always the subject of the tensions between innovation and optimization. Both objectives are relevant and are the subject of our work - although not always at the same time.

Structuring at macro-, meso- and micro-levels

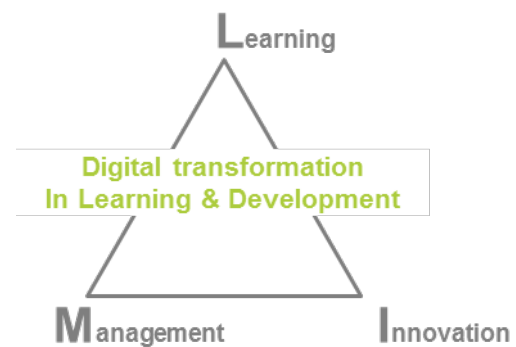
At macro level, we are concerned with the analysis and design of training organizations and corporate training areas as a whole (e.g. framework conditions for formal and informal learning). At a medium level, it is about analyzing and designing and orientating performance processes (needs analysis to evaluation) and more comprehensive training programs (e.g. to promote specialist careers). And, at a micro level, it is about analyzing and designing innovative and effective learning environments and learning designs (e.g. to develop specific digital competencies).

scil am Institut für Wirtschaftspädagogik (IWP-HSG)

scil is integrated in the Institut für Wirtschaftspädagogik (IWP-HSG) of the University of St. Gallen. scil was founded in 2003, initially funded by the Gebert Rüt Foundation and is financially independent today.

More on our work at scil

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scil work reports

The work reports of the swiss competence centre for innovations in learning (scil) at the University of St. Gallen may be retrieved at <https://www.scil-aktuell.ch> at no extra charge.

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