

Blended Learning: a Tried and Tested Customer Training Concept

Reports from Germany

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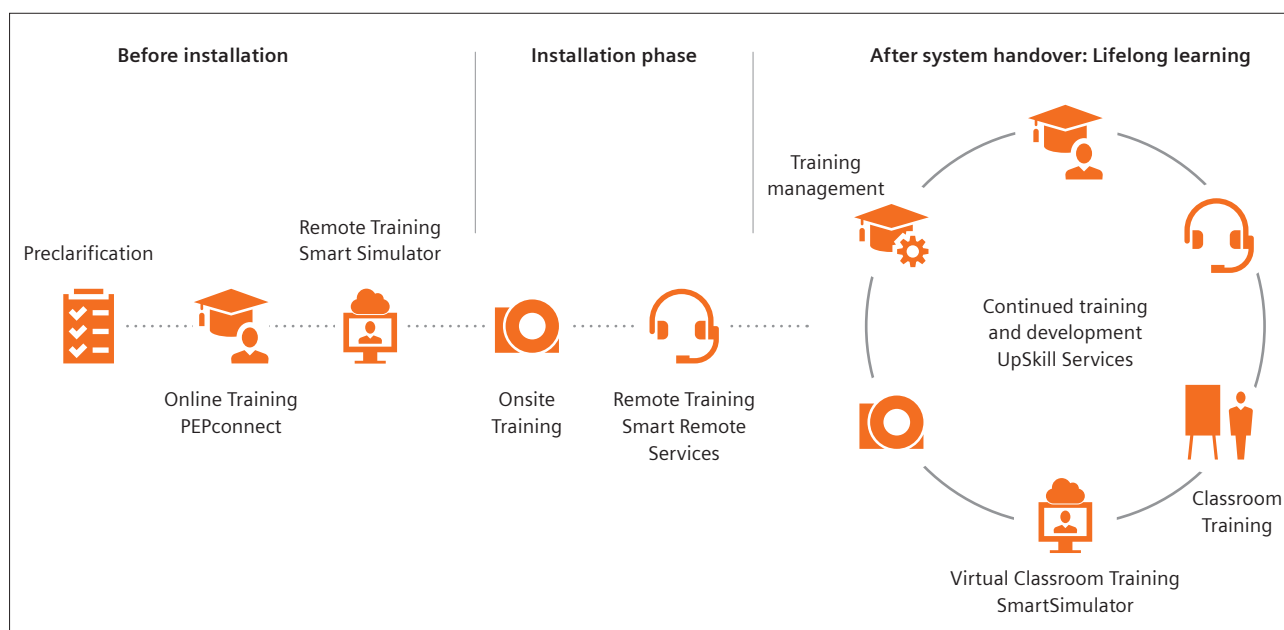
Introduction

As global digitalization continues to gather pace, a new form of learning has emerged in the form of blended learning, a combination of traditional and digital learning methods.

In the MRI division, we have been successfully applying our blended learning concept for the last two years. Preclarification plays a key role in this process, and is crucial to the success of the device handover and initial staff briefing. Two further important pillars are the

PEPconnect platform for self-study, and guided simulator training with a handbook, both of which are highly appreciated by our customers. These two forms of preparatory work make onsite training more efficient and organized.

At the same time – as the following examples show – this approach allows individual customer needs to be taken into account, and allows flexible design and planning of the forthcoming Initial Handover Training.



1 Blended learning training modules for MRI induction with subsequent lifelong learning opportunities

2019 – The pioneer: Radiologie Traunstein-Haslach

Our first blended learning course was administered in October 2019 at Radiologie Traunstein-Haslach, an imaging center in Germany. The practice's primary focus is on orthopedic issues. The radiologists employed at the center expect the highest levels of image quality and detail, also for complex scans.

Challenges and solutions

The transition from a MAGNETOM Espree system with syngo MR VB19 to a 3T MAGNETOM Lumina system with Numaris XA11B involved extensive changes for personnel. In view of the huge challenges faced by the entire team – due in part to differing levels of knowledge among staff members – the decision was made to trial a new training concept for the first time, in which employees had the opportunity to familiarize themselves with the new software environment in advance using the PEPconnect online learning platform. Moreover, the practice met the technical criteria for virtual teaching using the SmartSimulator thanks to a very fast and stable internet connection despite its rural location.

Customer feedback

"The transition from our old to our new scanner was greatly facilitated by the blended learning course provided. In the first phase, our highly diverse team of employees was equipped with a uniform level of basic knowledge using PEPconnect. Participants had a generous schedule to work through the various topics, and were able to organize their time as they saw fit both during working hours and at home.

In the second phase we were given another, more detailed introduction to the new interface using the SmartSimulator. In small teams, we were remotely guided

through the various cards and menus, and had our first hands-on experience of planning scans. To this end, an optimal technical setup and learning environment were of the utmost importance to allow us to focus our attention on content.

After the safety briefing, we were then able to swiftly begin conventional onsite training with the new device installed in the meantime, thereby making the best use of the face-to-face time available. This personal onsite briefing proved particularly effective thanks to the thorough groundwork laid by the preceding online modules."

Customer experience in northern Germany

Hamburg: Challenges and solutions

To begin with, there were uncertainties regarding the new system and software, but these were quickly laid to rest by the targeted preparation of the radiology technologists for onsite training using the PEPconnect online learning platform. Public holidays restricted the time available for onsite training. The training strategy was flexibly adapted, resulting in an intensive two-day SmartSimulator training course comprising structured and guided hands-on sessions. Maintaining the minimum distances imposed by COVID-19 restrictions was a challenge, but this problem was overcome by means of a specially installed video splitter¹.

Customer feedback

"Installation of our new MAGNETOM Altea went smoothly and swiftly. We prepared our radiology technologists in advance using the PEPconnect learning platform provided by Siemens Healthineers. We also received intensive training in the new software via the SmartSimulator, paving the way for a very straightforward launch. The onsite training went perfectly. To enable us to comply with COVID-19 social distancing regulations, our technical department installed a video splitter¹. This meant we could listen to our application specialist at the workstation while simultaneously following the results on our own monitor."



Alexander Hoffmann, M.D.,
Radiologische Allianz
Hamburg in the
Phoenix Center



2 The Radiologie Traunstein-Haslach team

¹This measure was implemented as a pilot project, and is not a standard part of our blended learning concept.

Lübeck: Challenges and solutions

Initial concerns about the transition to a system from another vendor were quickly allayed by a basic training course administered via the PEPconnect online learning platform – with a pace tailored to the needs of the radiology technologists and physicians, and the option to review particular topics without the need for a trainer. Familiarization with the new hardware and software before system installation: The online SmartSimulator training course, administered by experienced trainers, allowed both early exposure to the new interface and a preliminary discussion of protocols tailored to the customer's particular needs. Immediate and efficient operation of the new system required: Both the stepwise combination of online and onsite learning methods and offline protocol preparation facilitated the adoption of the new system, and effectively kept downtime of a productive system to a minimum.

Customer feedback

"While the system was being introduced in our department, we received highly focused onsite training, having completed both a self-learning module via PEPconnect and SmartSimulator administered by experienced trainers. This stepwise approach helped us to seamlessly transition from an old system from a different vendor and efficiently introduce a completely new software package."



Professor Alex Frydrychowicz, M.D., Schleswig-Holstein University Hospital, Lübeck Campus, Department of Radiology and Nuclear Medicine

Customer experience in southern Germany

Augsburg: Challenges and solutions

The transition from a different vendor and a lack of any prior experience with Siemens Healthineers 3T MRI systems seemed at first to be an obstacle. After an extensive preliminary consultation, however, the customer was able to define a shared goal that helped to allay concerns about the new system in advance. The customer required excellent image quality from the new technologies in a very short time, and prepared for this with advance training in the system interface via the PEPconnect learning platform, and customer-internal shadowing on a scanner of the same model. Another priority for the customer was a seamless start. Hands-on training of MRI personnel at the customer center in Erlangen², optimization of the sequences created in advance according to customer specifications, and a clear structure for efficient

onsite training with just three participants responsible for the device were key components of the customized training strategy.

Customer feedback

"On the morning the new device went into operation, our team was able to immediately begin scanning efficiently and independently, and was soon performing its first patient scans! The key to this successful outcome was consistent use of the weeks in which the device was being installed, which normally go unused for induction purposes, thanks to modern digital communication platforms and personal supervision. Besides effectively preparing the MRI team to begin operating the new device on day X, this approach also mitigates anxiety associated with the new device. In short: As far as our experience goes, the concept is a convincing one!"



Peter Mundinger, M.D., MSK & neuroradiology, H15 radiological private practice, Augsburg

Munich: Challenges and solutions

The transition from the previous *syngo* user interface and an MRI system from a different vendor was challenging. The simulator training with hands-on exercises gave participants a good feel for working with the new features. Image quality had to be at least on a par with that of the other vendor's 3T system. The competent and structured instruction in the new coil technologies and sequencing techniques during the onsite training yielded positive results in mere days. Workflow optimizations are a top priority for the customer, but in view of the construction site this issue can only be addressed at a later time along with other advanced topics.

Customer feedback

"We found the simulator training before the actual initial briefing highly beneficial. Besides allaying our fears about a new user interface, you also made sure we were well-prepared for the initial briefing. The hands-on exercises quickly gave participants a good feel for working with the new features. We were especially pleased with how the simulator training also took place in parallel via Microsoft Teams®. The fact that we could see you on the camera made for a more relaxed atmosphere and gave us the opportunity to establish a more personal connection. All in all, we found it to be a very successful and enjoyable collaboration!"

Michael Kirschbaum, head radiology technologist/healthcare economist, Neuroradiology department at LMU University Hospital, Munich

¹This measure was implemented as a one-off project, and is not a standard part of our blended learning concept.