Technical training is different from other training such as personal effectiveness training (“soft skills” training), leadership development or sales training, to name a few. The training content is more granular in technical training and it frequently requires contextualization (localization based on specific technical features) as it is developed. The size of the target audience is also generally more limited in technical training, particularly for advanced training because not as many people need to possess such specific expertise. Among the many differentiators, the more critical ones are associated with:

- The necessity of alignment to strategic business goals,
- The trigger that initiates the training,
- The planning horizon and dependencies associated with developing the training,
- The consequence of errors,
- And, the required competencies involved in technical training.

The overall technical training strategy must be an integral part of the business strategy to ensure employees acquire the technical knowledge and skills they need at the right time – the moment the new technology or equipment is ready to be used. Achieving alignment to the business strategy is not a one time or annual event, it requires ongoing tight integration and adjustment. Alignment to the business strategy allows the technical training department to gauge the training resources that will be needed at some point over the course of the year.

The trigger for technical training is often a technology change, a new product launch, new technical equipment or process improvement initiative on the business roadmap. The technical training department must engage closely with engineering, technology and operational functions to understand the timing of the needed training. Technical training is “demand driven,” that is, deployed immediately when needed. While an upcoming technology implementation may be represented on the strategic business plan, changes in business conditions make planning for technical training less predictable in terms of timing.

The planning horizon for technical training is shorter because of rapid changes in technology and equipment and therefore technical training content must be refreshed more frequently than non-technical training. This need for constant updating of technical training results in a shorter shelf life. As engineers build and test new technology features or upgrades, the window of opportunity to develop technical training may be heavily impacted, possibly delayed, moved up earlier in the schedule or even shortened due to hard dependencies on the overall project and firm launch dates. These dependencies and intricacies are typically not associated with other types of training.

Most importantly, technical training must be accurate and complete, particularly when the consequences of errors in the training material could be disastrous to the business or life threatening to people. This is not usually the case with non-technical training. If equipment is not used or operated properly, safety risks and injuries could result. For example, if technical training on a new respiratory pump is insufficient, patients’ health or even lives could be compromised.

It should be evident that technical training requires two core competencies: expertise in both technology (the technical aspects of the content) and in training (how to train employees to maximize learning and skills application in the workplace). While the training organization possesses the training competency, it typically does not have the technology expertise. The technology competency resides in research and development, engineering, operations or manufacturing functions. For the technical training to be successful, technical experts from these departments must be involved. In high performing organizations, the technical training organization and “technical” departments collaborate and leverage the core competency each one brings to the table.

Being aware of these differences and taking appropriate actions helps to ensure that technical training is delivered on time and has the intended impact. While it is more complex than other types of training, technical training has some distinct advantages as it is easier to show the impact of training on performance or the ROI of training.

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